## **Basic Survey (Radiation Dose Estimates) Reported on 25 December 2014**

## 1. Response Rates and Radiation Dose Estimates

## **1.1 Response Rates of Residents**

The overall effective response rate to the Basic Survey (radiation dose estimates), which targeted the entire population of Fukushima Prefecture, was 26.9% (553,418/2,055,383) as of 31 October 2014. Response rate of the simplified questionnaire was 3.1% (62,805/2,055,383). (See Table 1)

Table 1												
Res	ponse rates to t	he Basic Surv	/ey									
As of 31 October 2014												
Target	population	2,055,383										
	Original questionnaire 490,613 23.9%											
Response	Simplified questionnaire*	62,805	3.1%									
	Total	553,418	26.9%									
,	*Preliminary figures Fractions have been rounded.											

The following tables show the results of the original and simplified questionnaires combined.

Since we started providing the simplified questionnaire around a year ago, the response rates have increased especially in the areas where the proportion had been low. In Minami-aizu, the increase was 6.6% (from 13.4 to 20.0%). (See Table 2)

Table 2	Response rates by area												
	Kempoku	Kenchu	Kennan	Aizu	Minami-aizu	Soso	lwaki	Total					
30 Sept. 2013 (a)	26.5%	20.9%	17.6%	15.1%	13.4%	44.4%	21.9%	23.6%					
31 Oct. 2014 (b)	29.8%	23.7%	21.9%	20.9%	20.0%	45.4%	25.0%	26.9%					
Difference (b-a)	3.3%	2.8%	4.3%	5.8%	6.6%	1.0%	3.1%	3.3%					

## **1.2 Radiation Dose Estimates**

Doses have been estimated for 531,691 of 553,418 respondents (96.1%) as of 31 October 2014, and the results have been returned to 512,194 respondents (Table 3).

Table 3	Response rates to the basic Survey														
	As of 31 October 2014														
Area(preceding	Target	_	Response	Completed		Returned									
and full-scale	and full-scale population Response rates dose Proportion results Proportion														
surveys)	surveys) estimation														
a b c=b/a d e=d/b f g=f/b															
Kempoku         504,062         150,123         29.8%         144,637         96.3%         140,301         93.5%															
Kenchu	557,266	131,995	23.7%	127,871	96.9%	123,944	93.9%								
Kennan	152,229	33,362	21.9%	31,969	95.8%	29,868	89.5%								
Aizu	267,205	55,891	20.9%	52,542	94.0%	47,532	85.0%								
Minami-aizu	30,787	6,169	20.0%	5,736	93.0%	4,999	81.0%								
Soso	195,608	88,895	45.4%	86,156	96.9%	85,536	96.2%								
lwaki	348,226	86,983	25.0%	82,780	95.2%	80,014	92.0%								
Total	2,055,383	553,418	26.9%	531,691	96.1%	512,194	92.6%								
Including Yamaki	ya of Kawamata	a, Namie and li	itate.												

We have been estimating doses for non-residents who were visiting or staying in Fukushima Prefecture at the time of the accident (Table 4).

Γ	Table 4	4 Response rates to the Basic Survey												
	(Visitors) As of 31 October 2014													
	Number of requests	Responses	Response rate	Completed dose estimates	Proportion	Returned results	Proportion							
	а	b	c=b/a	d	e=d/b	f	g=f/b							
	3,858	2,125	55.1%	1,869	88.0%	1,864	87.7%							

## 2. Results of Radiation Dose Estimates

Table 5 shows the numbers of completed dose estimates (see Table 3) —excluding the data in the estimation period less than four months—within a range of values.

Radiation doses for a total of 453,183 residents have been estimated to date. The results for 444,362 respondents (excluding radiation workers) suggest that the doses for about 87% of the respondents in Kempoku area and about 92% in Kenchu area were <2 mSv. The doses for approximately 88% of the respondents in Kennan area and more than 99% of those in Aizu and Minami-aizu areas were <1 mSv. Doses for about 78% of respondents in the Soso area and more than 99% of respondents in Iwaki were also <1 mSv.

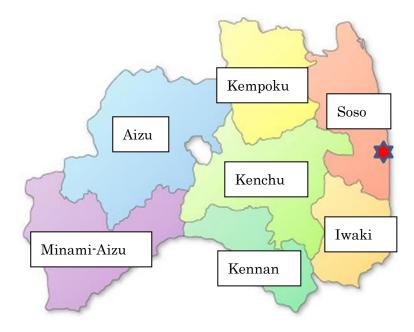
Table 5			E	Estimate	ed extern	nal radiat	ion d	oses (pre	cedin	g and fu	III-sca	ale surve	ey)				As of 3	31 October	r 2014
Effective										By ar	ea (ex	cluding rac	diation	workers)					
Dose (mSv)	Total	Exclu	ding radia	ation work	ers	Kempoł	ku *	Kench	าน	Kenna	an	Aizu	ı	Minami	-aizu	Soso	**	lwak	d
<1	281,706	276,227	62.2%	93.9%		24,368	20.2%	55,611	51.7%	24,025	88.4%	42,758	99.3%	4,618	99.3%	55,068	77.6%	69,779	99.1%
1-2	143,261	141,003	31.7%	33.378		80,736	67.0%	43,863	40.7%	3,127	11.5%	272	0.6%	32	0.7%	12,362	17.4%	611	0.9%
2-3	24,618	24,261	5.5%	5.8%	99.8%	14,810	12.3%	7,751	7.2%	15	0.1%	21	0.0%	0	-	1,637	2.3%	27	0.0%
3-4	1,516	1,441	0.3%	5.6 %		452	0.4%	406	0.4%	0	-	1	0.0%	0	-	579	0.8%	3	0.0%
4-5	536	494	0.1%	0.2%		39	0.0%	5	0.0%	0	-	0	-	0	-	449	0.6%	1	0.0%
5-6	429	376	0.1%	0.270		18	0.0%	3	0.0%	0	-	0	-	0	-	354	0.5%	1	0.0%
6-7	264	226	0.1%	0.1%		10	0.0%	1	0.0%	0	-	0	-	0	-	215	0.3%	0	-
7-8	151	114	0.0%	0.1%	0.2%	1	0.0%	0	-	0	-	0	-	0	-	113	0.2%	0	-
8-9	113	73	0.0%	0.0%		1	0.0%	0	-	0	-	0	-	0	-	72	0.1%	0	-
9-10	69	39	0.0%	0.078		0	-	0	-	0	-	0	-	0	-	39	0.1%	0	-
10-11	66	34	0.0%	0.0%		0	-	0	-	0	-	0	-	0	-	34	0.0%	0	-
11-12	52	31	0.0%	0.078		1	0.0%	0	-	0	-	0	-	0	-	30	0.0%	0	-
12-13	35	13	0.0%	0.0%	0.0%	0	-	0	-	0	-	0	-	0	-	13	0.0%	0	-
13-14	34	12	0.0%	0.078		0	-	0	-	0	-	0	-	0	-	12	0.0%	0	-
14-15	27	6	0.0%	0.0%		0	-	0	-	0	-	0	-	0	-	6	0.0%	0	-
<u>&gt;</u> 15	306	12	0.0%	0.078	0.0%	0	-	0	-	0	-	0	-	0	-	12	0.0%	0	-
Total	453,183	444,362	100.0%	100.0%	100.0%	120,436	100%	107,640	100%	27,167	100%	43,052	100%	4,650	100%	70,995	100%	70,422	100%
Max	66mSv	25mSv	$\square$			11mSv	$\langle$	6.3mSv		2.6mSv		3.6mSv		1.9mSv		25mSv		5.9mSv	
Mean value         0.9mSv         0.8mSv         0.3mSv         0.3																			
* Including	Yamakiya	of Kawama	ata.										Percer	ntages hav	e been	rounded an	d may	not total to	100%.
** Including	g Namie an	id litate.										E	xcludin	g those wi	ith estin	nation perio	od less	than four m	onths.

## **3.** Evaluation of the results

The latest effective radiation dose estimates showed similar trends to those observed so far. Since previous epidemiological studies<sup>1</sup> indicate no significant health effects at doses  $\leq 100 \text{ mSv}$ , we concluded that radiation doses estimated so far are unlikely to cause adverse effects on health, although this conclusion is based on external radiation doses estimated only for the first four months following the accident.

## References

1) Sources and effects of ionizing radiation, United Nations Scientific Committee on the Effects of Atomic Radiation, UNSCEAR 2008 Report to the General Assembly, with scientific annexes.



## Survey on the representativeness of dose distribution shown in the Basic Survey (Tentative plan)

## **1. Background and Purpose**

At the 16<sup>th</sup> Prefectural Oversight Committee Meeting for the Fukushima Health Management Survey, questions were raised about whether people who have responded to the Basic Survey represent the whole population in regard to external dose estimates and dose distribution. To answer this, we will investigate how the dose distribution of as yet nonrespondents compares with respondents on a geographic area-by-area basis.

## 2. Survey Population

We plan to use a two-stage sampling method based on nationwide and prefecture-wide polls.<sup>1</sup> As a first step, we will randomly select geographic areas for polling, with special weight given to evacuation zones. In the next step, we will randomly select a total of around 4,000 to 5,000 samples throughout the prefecture.

## 3. Methods

After reviewing the responses, we will visit nonrespondents to conduct a series of questions starting in early fiscal (FY) 2015.<sup>2</sup> To meet the need for a large workforce, we will outsource and hire polltakers who will visit nonrespondents to support filling out the questionnaires. This enables us to ask them why they did not answer the questionnaire, and encourage their cooperation. If they are not home, a polltaker will visit them again to raise the response rates. This door-to-door survey should be completed by the end of FY 2015.

## 4. Results

We will estimate the doses for all respondents. By comparing the dose distribution of the respondents from the door-to-door survey and those who responded previously by mail, we will find out if what has already been reported is an accurate and unbiased assessment of dose distribution for the whole population of Fukushima Prefecture.

Reasons gathered from the respondents for not answering the questionnaire will be categorized and tallied to guide how the instructions for filling out the questionnaire and the Basic Survey might be improved.

2) Japan's fiscal and academic year begins April 1.

<sup>1)</sup> The cabinet office typically selects 3,000 to 10,000 samples for a nationwide poll.

Appendix '	1
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Response rates to the Basic Survey by district

	Preceding and	l full-scale s	urveys				As of 31 Oc	tober 2014
Area	District	Target population	Response	Response rates	Completed dose estimation	Proportion	Returned results	Proportior
		а	b	c=b/a	d	e=d/b	f	g=f/t
	Fukushima	295,654	93,181	31.5%	90,040	96.6%	87,076	93.4%
	Nihonmatsu	60,859	16,247	26.7%	15,653	96.3%	15,258	93.9%
	Date	67,581	18,156	26.9%	17,447	96.1%	16,927	93.2%
	Motomiya	31,766	8,711	27.4%	8,194	94.1%	7,964	91.4%
Kempoku	Kori	13,207	3,866	29.3%	3,739	96.7%	3,662	94.7%
	Kunimi	10,316	2,976	28.8%	2,862	96.2%	2,802	94.2%
	Kawamata	15,886	5,083	32.0%	4,889	96.2% 95.3%	4,856	95.5%
	Otama	8,793	1,903 150,123	21.6% 29.8%	1,813 144,637	95.3% 96.3%	1,756 140,301	92.3% 93.5%
	Subtotal Koriyama	504,062 339,736	83,992	29.8%	81,587	90.3 % 97.1%	78,967	93.37
	Sukagawa	80,162	16,642	29.7%	16,037	96.4%	15,541	93.4%
	Tamura	41,726	10,042	24.0%	9,594	95.8%	9,436	94.2%
	Kagamiishi	13,109	2,851	21.7%	2,770	97.2%	2,690	94.4%
	Tenei	6,469	1,169	18.1%	1,131	96.7%	1,005	86.0%
	Ishikawa	17,490	4,156	23.8%	4,023	96.8%	3,917	94.2%
Kenchu	Tamakawa	7,338	1,468	20.0%	1,417	96.5%	1,380	94.0%
	Hirata	7,057	1,630	23.1%	1,563	95.9%	1,522	93.4%
	Asakawa	7,163	1,476	20.6%	1,433	97.1%	1,385	93.8%
	Furudono	6,319	1,296	20.5%	1,247	96.2%	1,219	94.1%
	Miharu	18,994	4,766	25.1%	4,620	96.9%	4,525	94.9%
	Ono	11,703	2,537	21.7% 23.7%	2,449	96.5%	2,357	92.9%
	Subtotal	557,266	131,995	23.7%	127,871	96.9% 95.0%	123,944	93.9% 86.2%
	Shirakawa	65,428 20,091	14,846 4,797	22.7 %	14,100 4,637	95.0%	12,793 4,470	93.2%
	Nishigo Izumizaki	6,931	4,797	19.0%	1,269	96.5%	4,470	93.27
	Nakajima	5,306	964	18.2%	928	96.3%	881	91.4%
	Yabuki	18,343	4,017	21.9%	3,887	96.8%	3,741	93.1%
Kennan	Tanagura	15,383	2,935	19.1%	2,841	96.8%	2,727	92.9%
	Yamatsuri	6,489	1,434	22.1%	1,374	95.8%	1,332	92.9%
	Hanawa	10,062	2,259	22.5%	2,170	96.1%	1,966	87.0%
	Samegawa	4,196	795	18.9%	763	96.0%	743	93.5%
	Subtotal	152,229	33,362	21.9%	31,969	95.8%	29,868	89.5%
	Aizuwakamatsu	127,815	28,934	22.6%	27,322	94.4%	24,598	85.0%
	Kitakata	53,201	10,139	19.1%	9,326	92.0%	8,003	78.9%
	Kitashiobara	3,275	595	18.2%	563	94.6%	516	86.7%
	Nishiaizu	7,725	1,432	18.5%	1,327	92.7%	1,243	86.8%
	Bandai	3,888	752	19.3%	730	97.1%	679	90.3%
	Inawashiro	16,272		22.0%		95.3%		90.8%
Aizu	Aizubange Yugawa	17,881 3,514	3,202 705	17.9% 20.1%	3,025 670	94.5% 95.0%	2,809 606	87.7% 86.0%
	Yanaizu	4,077	705	17.4%	670	94.6%	626	88.2%
	Mishima	2,031	372	18.3%	336	94.0%	319	85.8%
	Kaneyama	2,544	619	24.3%	560	90.5%	547	88.4%
	Showa	1,569	344	21.9%	317	92.2%	313	91.0%
	Aizumisato	23,413	4,507	19.2%	4,284	95.1%	4,023	89.3%
	Subtotal	267,205	55,891	20.9%	52,542	94.0%	47,532	85.0%
	Shimogo	6,650	1,215	18.3%	1,146	94.3%	1,072	88.2%
	Hinoemata	614	142	23.1%	130	91.5%	130	91.5%
Minami-aizu		5,030	1,083	21.5%	1,014	93.6%	951	87.8%
	Minami-aizu	18,493	3,729	20.2%	3,446	92.4%	2,846	76.3%
	Subtotal	30,787	6,169	20.0%	5,736	93.0%	4,999	81.0%
	Soma	37,371	12,988	34.8%	12,444	95.8%	12,294	94.7%
	Minami-soma	70,012	29,822	42.6%	29,026	97.3%	28,760	96.4%
	Hirono Naraha	5,165 7,963	2,197 4,137	42.5% 52.0%	2,115 3,971	96.3% 96.0%	2,091 3,940	95.29 95.29
	Tomioka	15,753	4,137	54.3%	8,357	90.0%	3,940 8,327	97.3%
	Kawauchi	2,996	1,519	50.7%	1,472	96.9%	1,463	96.39
Soso	Okuma	11,476	6,009	52.4%	5,768	96.0%	5,732	95.4%
	Futaba	7,051	3,915	55.5%	3,813	97.4%	3,803	97.19
	Namie	21,333	12,868	60.3%	12,591	97.8%	12,571	97.79
	Katsurao	1,541	811	52.6%	756	93.2%	750	92.5%
		0.257	2,652	31.7%	2,539	95.7%	2,509	94.6%
	Shinchi	8,357	2,052	0 /0	_,	S	,	
	Shinchi Iitate	6,590	3,416	51.8%	3,304	96.7%	3,296	96.5%
		6,590 195,608	3,416 88,895	51.8% 45.4%	3,304 86,156	96.9%	3,296 85,536	96.2%
Iwaki	litate	6,590	3,416	51.8%	3,304		3,296	

\*Including Yamakiya of Kawamata, Namie and litate.

#### Basic Survey, Fukushima Health Management Survey

Estimated external radiation doses in the first four months (from 11 March through 11 July)

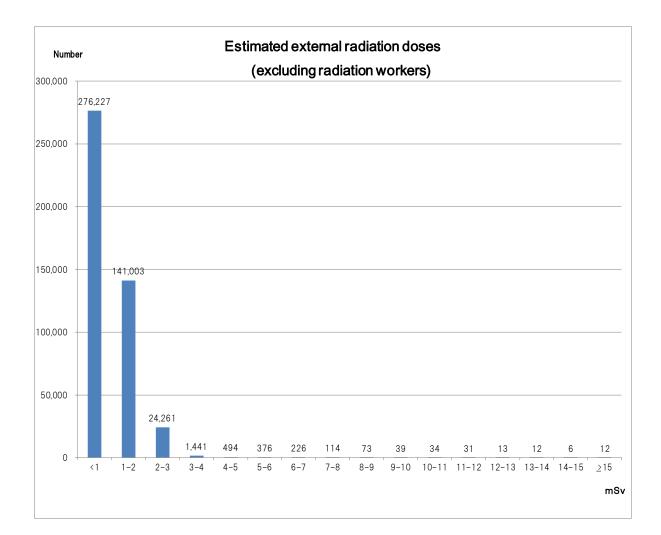
Preceding Survey and full-scale survey

### Estimated external radiation doses by region

#### As of 31 October 2014

Estimated external radiation doses by region													
Effective Dose	Total	Excluding radiation				By region					portion ( ding rad		
(mSv)	TOtal	workers	Kempoku	Kenchu	Kennan	Aizu	Minami-aizu	Soso	lwaki		workers		
<1	281,706	276,227	24,368	55,611	24,025	42,758	4,618	55,068	69,779	62.2	93.9		
1-2	143,261	141,003	80,736	43,863	3,127	272	32	12,362	611	31.7	93.9		
2-3	24,618	24,261	14,810	7,751	15	21	0	1,637	27	5.5	5.8	99.8	
3-4	1,516	1,441	452	406	0	1	0	579	3	0.3	5.0		
4-5	536	494	39	5	0	0	0	449	1	0.1	0.2		
5-6	429	376	18	3	0	0	0	354	1	0.1	0.2		
6-7	264	226	10	1	0	0	0	215	0	0.1	0.1		
7-8	151	114	1	0	0	0	0	113	0	0.0	0.1	0.2	
8-9	113	73	1	0	0	0	0	72	0	0.0	0.0		
9-10	69	39	0	0	0	0	0	39	0	0.0	0.0		
10-11	66	34	0	0	0	0	0	34	0	0.0	0.0		
11-12	52	31	1	0	0	0	0	30	0	0.0	0.0		
12-13	35	13	0	0	0	0	0	13	0	0.0	0.0	0.0	
13-14	34	12	0	0	0	0	0	12	0	0.0	0.0		
14-15	27	6	0	0	0	0	0	6	0	0.0	0.0		
<u>&gt;</u> 15	306	12	0	0	0	0	0	12	0	0.0	0.0	0.0	
Total	453,183	444,362	120,436	107,640	27,167	43,052	4,650	70,995	70,422	100.0	100.0	100.0	
Max	66	25	11	6.3	2.6	3.6	1.9	25	5.9				
Mean value	0.9	0.8	1.4	1.0	0.6	0.2	0.1	0.8	0.3	3			

Percentages have been rounded and may not total to 100%.



Appendix 2

Appendix 3

As of 31 October 2014

## Estimated external radiation dose by age group (excluding radiation workers)

Effective Dose				Age at the	e time of the	e disaster				Total
(mSv)	0 - 9	10 - 19	20 - 29	30 - 39	40 - 49	50 - 59	60 - 69	70 - 79	80 -	TOtal
<1	45,801	41,874	20,221	32,386	27,318	31,588	35,063	25,019	16,957	276,227
1-2	21,680	20,362	9,569	17,339	16,091	18,133	18,966	11,986	6,877	141,003
2-3	5,975	3,962	1,057	2,203	2,137	2,867	3,299	1,935	826	24,261
3-4	239	156	78	150	144	227	221	159	67	1,441
4-5	19	45	36	40	76	90	77	72	39	494
5-6	13	14	27	33	43	83	73	63	27	376
6-7	4	5	11	21	25	44	51	44	21	226
7-8	3	6	7	8	13	34	22	14	7	114
8-9	2	4	3	8	7	15	14	10	10	73
9-10	0	1	1	2	4	12	11	5	3	39
10-11	1	1	1	2	5	11	4	6	3	34
11-12	0	0	1	3	0	6	8	11	2	31
12-13	0	0	0	0	1	6	4	1	1	13
13-14	0	0	1	1	1	4	3	2	0	12
14-15	0	0	0	0	0	3	3	0	0	6
<u>&gt;</u> 15	0	0	0	0	2	2	5	1	2	12
Total	73,737	66,430	31,013	52,196	45,867	53,125	57,824	39,328	24,842	444,362

## Estimated external radiation doses by sex in the first four months (excluding radiation workers)

Effective Dose		By sex			Total	Proportion
(mSv)	Male	Proportion (%)	Female	Proportion (%)		(%)
<1	123,393	60.6	152,834	63.5	276,227	62.2
1-2	65,472	32.1	75,531	31.4	141,003	31.7
2-3	13,188	6.5	11,073	4.6	24,261	5.5
3-4	918	0.5	523	0.2	1,441	0.3
4-5	276	0.1	218	0.1	494	0.1
5-6	194	0.1	182	0.1	376	0.1
6-7	126	0.1	100	0.0	226	0.1
7-8	67	0.0	47	0.0	114	0.0
8-9	43	0.0	30	0.0	73	0.0
9-10	23	0.0	16	0.0	39	0.0
10-11	21	0.0	13	0.0	34	0.0
11-12	17	0.0	14	0.0	31	0.0
12-13	6	0.0	7	0.0	13	0.0
13-14	8	0.0	4	0.0	12	0.0
14-15	3	0.0	3	0.0	6	0.0
<u>&gt;</u> 15	9	0.0	3	0.0	12	0.0
Total	203,764	100.0	240,598	100.0	444,362	100.0

Percentages have been rounded and may not total to 100%.

#### Basic Survey, Fukushima Health Management Survey

Estimated external radiation doses (preceding and full-scale surveys)

#### As of 31 October 2014

Estimated external radiation doses by region in the first four months (from 11 March through 11 July) excluding radiation workers

Area	a/region	<b>F1</b>	1.2	2.2	3.4	AE		ffective			9-10	10.11	11 10	12 12	12 14	14 15	>15	Tota
	- · · ·	<1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9		10-11	11-12	12-13	13-14	14-15	<u>&gt;</u> 15	-
	Fukushima	15,842	51,058	8,978	145	12	10	4	0	0	0	0	0	0	0	0	0	76,0
	Nihonmatsu	1,275	8,100	3,258	86	1	0	0	0	0	0	0	0	0	0	0	0	12,7
	Date	4,300	8,825	1,113	145	8	2	3	1	1	0	0	0	0	0	0	0	14,3
Kempoku	Motomiya	705	4,963	1,077	20	1	0	0	0	0	0	0	0	0	0	0	0	6,7
	Kori	311	2,720	66	2	0	1	0	0	0	0	0	0	0	0	0	0	3,
	Kunimi	935	1,390	12	0	0	0	0	0	0	0	0	0	0	0	0	0	2,
	Kawamata	621	2,664	178	52	17	5	3	0	0	0	0	1	0	0	0	0	3,
	Otama	379	1,016	128	2	0	0	0	0	0	0	0	0	0	0	0	0	1,
Kempo	ku Subtotal	24,368	80,736	14,810	452	39	18	10	1	1	0	0	1	0	0	0	0	120,
	Koriyama	22,967	38,566	7,332	396	5	3	1	0	0	0	0	0	0	0	0	0	69,
	Sukagawa	10,240	3,051	315	4	0	0	0	0	0	0	0	0	0	0	0	0	13,
	Tamura	7,122	651	22	3	0	0	0	0	0	0	0	0	0	0	0	0	7,
	Kagamiishi	2,286	71	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,
	Tenei	366	543	52	1	0	0	0	0	0	0	0	0	0	0	0	0	
	Ishikawa	3,089	38	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3,
Kenchu	Tamakawa	1,142	17	3	0	0	0	0	0	0	0	0	0	0	0	0	0	1,
	Hirata	1,256	34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,
	Asakawa	1,172	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,
	Furudono	1,032	14	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1,
	Miharu	3,006	782	22	2	0	0	0	0	0	0	0	0	0	0	0	0	3,
	Ono	1,933	81	22	0	0	0	0	0	0	0	0	0	0	0	0	0	2,
Kench	u Subtotal	55,611	43,863	7,751	406	5	3	1	0	0	0	0	0	0	0	0	0	107,
Rench				7,751	406	5	0	0	0	0	0	0	0	0	0	0	0	
	Shirakawa	10,937	1,107															12,
	Nishigo	2,136	1,844	2	0	0	0	0	0	0	0	0	0	0	0	0	0	3,
	Izumizaki	1,033	19	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1,
K.	Nakajima	776	11	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kennan	Yabuki	3,253	78	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3,
	Tanagura	2,406	28	3	0	0	0	0	0	0	0	0	0	0	0	0	0	2,
	Yamatsuri	1,098	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,
	Hanawa	1,764	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,
	Samegawa	622	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Kenna	in Subtotal	24,025	3,127	15	0	0	0	0	0	0	0	0	0	0	0	0	0	27,
	Aizuwakamatsu	22,373	144	11	0	0	0	0	0	0	0	0	0	0	0	0	0	22,
	Kitakata	7,622	46	1	1	0	0	0	0	0	0	0	0	0	0	0	0	7,
	Kitashiobara	455	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Nishiaizu	990	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Bandai	615	9	1	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Inawashiro	2,741	27	3	0	0	0	0	0	0	0	0	0	0	0	0	0	2,
Aizu	Aizubange	2,527	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,
	Yugawa	570	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Yanaizu	529	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Mishima	243	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Kaneyama	393	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Showa	235	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	
		3,465		3	0	0	0			0	0		0			0	0	3,
۸:	Aizumisato Subtotal		19 272	21	1	0	0	0	0	0	0	0	0	0	0	0	0	
Aizu		42,758																43,
	Shimogo	917	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
inami-aizu	Hinoemata	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Tadami	809	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Minami-aizu	2,792	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,
Minami-a	aizu Subtotal	4,618	32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,
	Soma	9,702	439	86	20	5	0	0	0	0	2	0	0	0	0	0	0	10,
	Minami-soma	18,826	6,096	502	96	35	3	6	4	1	0	0	1	0	0	0	0	25,
	Hirono	1,818	54	2	0	0	0	1	0	1	0	0	0	0	0	0	0	1,
	Naraha	3,351	127	13	2	0	1	1	0	0	0	0	0	0	0	0	0	3,
	Tomioka	5,785	1,098	98	18	3	2	0	3	2	0	0	1	0	0	0	0	7,
Seco	Kawauchi	954	345	16	1	0	1	1	1	0	0	0	0	0	0	0	0	1
Soso	Okuma	3,318	1,263	109	17	6	4	4	3	0	2	2	1	0	4	0	1	4,
	Futaba	2,653	464	72	18	6	4	3	6	2	1	0	2	0	0	0	1	3,
	Namie	5,863	1,972	355	64	37	17	15	12	9	5	11	8	5	4	3	6	8
	Katsurao	495	161	24	4	0	1	0	0	0	0	0	0	0	0	0	0	
	Shinchi	2,107	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,
	litate	196	323	360	339	357	321	184	84	57	29	21	17	8	4	3	4	2
Soco	Subtotal	55,068	12,362	1,637	579	449	354	215	113	72	39	34	30	13	12	6	12	70,
lwaki		69,779	611	27	3/3	449	1	0	0	0	0	0	0	0	0	0	0	70,
	lwaki Fotal														12	6	12	
	Fotal	276,227	141,003	24,261	1,441	494	376	226	114	73	39	34	31	13				444,
_		62.2	31.7	5.5	0.3	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10
Propo	ortion (%)	93.		5.8		0.:	2	0.1		0.0	J	0.	U	0.	0	0.0		10
				99.8					0.2					0.0			0.0	10
Vi	isitors	1,321	264	18	2	0	0	0	0	0	0	0	0	0	0	0	0	1
	+Visitors	277,548	141,267	24,279	1 / / 3	494	376	226	114	73	39	34	31	13	12	6	12	445

## Interim Report of Thyroid Ultrasound Examination (Initial Screening)

Reported on 25 December 2014 Revised on 17 February and 5 June 2015

## 1. Summary

## 1.1 Purpose

One of the health problems caused by the Chernobyl nuclear power plant accident was thyroid cancer in childhood caused by internal exposure to radioactive iodine.

In response to the Tokyo Electric Power Company's (TEPCO's) Fukushima Daiichi nuclear accident, Fukushima Prefecture started a Thyroid Ultrasound Examination program to protect the health of children over their lifetimes. Initial Screening aims to check the baseline condition of participants' thyroid glands.

## 1.2 Group

Residents of Fukushima Prefecture, including visitors, as of 11 March 2011, aged 0-18 years (born between 2 April 1992 and 1 April 2011).

#### 1.3 Implementation Period

The Initial Screening started from 9 October 2011 and was planned to end on 31 March 2014, but we continued these examinations until notice of the Full-scale Thyroid Screening program was sent to residents. The data tabulation period lasted to 31 October 2014.

We continue to conduct confirmatory testing on the basis of the primary test results.

#### 1.4 Responsible Organizations

Fukushima Prefecture commissioned Fukushima Medical University to conduct the survey in cooperation with institutions inside and outside Fukushima Prefecture.

We started the primary examination from 1 November 2012 outside Fukushima, and 92 institutions have agreed to cooperate as of 31 October 2014.

The confirmatory examination has been conducted in Koriyama and Iwaki in Fukushima Prefecture from July 2013, Aizuwakamatsu from August 2014, and several institutions outside Fukushima Prefecture from November 2013. As of 31 October 2014, 25 institutions conduct the examination.

## 1.5 Method

1.5-1 Primary Examination

We used ultrasonography for examination of the thyroid gland.

Assessments were made by specialists on the basis of the following criteria.

-Diagnostic Criteria: A

Those with A1 and A2 test results were advised to take the next examination starting from April 2014.

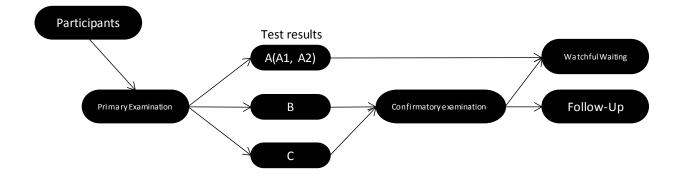
- (A1) No nodules / cysts
- (A2) Nodules <5.0mm or cysts <20.0mm
- -Diagnostic Criteria: B
- Those with B test result are advised to take the Confirmatory Examination.
- (B) Nodules  $\geq$  5.1mm or cysts  $\geq$  20.1mm

Some A2 test results may be classified as B results when clinically indicated.

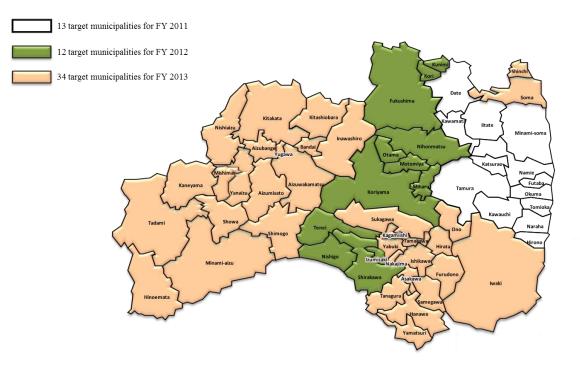
- -Diagnostic Criteria: C
- Those with C test result are advised to take the Confirmatory Examination.
- (C) Immediate need for confirmatory examination.
- 1.5-2 Confirmatory Examination

We conduct fine-needle aspiration cytology (FNAC), blood test, and urine test for those with B or C test results.

## 1.5-3 Flow chart



## 1.6 Target Municipalities



## 2.1 Results (As of 31 October 2014)

2.1-1 Primary Examination

The participation rate as of 31 October 2014 is 80.7% (296,586/367,686). See Appendix 2 and 3. The results have been returned to 99.9% of the 296,253 participants (Appendix 4 and 5). Those with A1 or A2 test results were 294,012 (99.2%), B were 2,240 (0.8%), and C were 1.

Table 1. Screening test coverage as of 31 October 2014

	Townst	Participants	;		Test re	esults				
	Target Population	Proportion (%)	Screened	Proportion (%)		Class				
	_	1100011001(70)	outside		1	1	Requiring confirmatory test			
	a	b (b/a)	Fukushima	c (c/b)	A1 d (d/c)	A2 e (e/c)	Bf(f/c)	C g (g/c)		
FY 2011	47,768	41,810 (87.5)	2,025	41,810 ( 100.0)	26,373 (63.1)	15,216 (36.4)	221 (0.5)	0 (0.0)		
FY 2012	161,137	139,341 (86.5)	4,266	139,269 (99.9)	76,160 (54.7)	62,121 (44.6)	987 (0.7)	1 (0.0)		
FY 2013	158,781	115,435 (72.7)	3,070	115,174 ( 99.8)	50,100 (43.5)	64,042 (55.6)	1,032 (0.9)	0 (0.0)		
Total	367,686	296,586 (80.7)	9,361	296,253 ( 99.9)	152,633 (51.5)	141,379 (47.7)	2,240 (0.8)	1 (0.0)		

	Number of confirmed	Number and proportions of children with nodules/cysts					
	screening results	Noo	dules	Су	vsts		
		<u>&gt;</u> 5.1mm	<u>&lt;</u> 5.0mm	<u>&gt;20.1mm</u>	<u>&lt;</u> 20.0mm		
	а	b (b/a)	c (c/a)	d (d/a)	e (e/a)		
FY 2011	41,810	219 (0.5)	232 (0.6)	1 (0.0)	15,140 (36.2)		
FY 2012	139,269	973 (0.7)	730 (0.5)	9 (0.0)	62,234 (44.7)		
FY 2013	115,174	1,030 (0.9)	712 (0.6)	2 (0.0)	64,330 (55.9)		
Total	296,253	2,222 (0.8)	1,674 (0.6)	12 (0.0)	141,704 (47.8)		

Table 2. Number and proportion of children with nodules/cysts as of 31 October 2014

Fractions have been rounded and may not total to 100%.

Because of the duplication of the participants, some numbers are not consistent with the previous ones.

#### 2.1-2 Confirmatory Examination

The number of participants with B or C test results who required further testing is 2,241, of whom 2,051 (91.5%) underwent the confirmatory testing. Among them, 1,985 (96.8%) have completed the tests (Appendix 6).

Of 1,985 children, 673 (33.9%), specifically 116 with A1 and 557 with A2 results (Table 3), were recommended for watchful waiting.

Of 1, 312 (66.1%) needed 6 to 12 months follow-up provided by health insurance, 519 (39.6%) underwent FNAC.

	Number of children	Participants	ants Confirmed test results						
	requiring confirmatory	Proportion (%)	Confirmatory test	Next screenin	g advised	Follow-u	ıp advised		
	test a	b (b/a)			coverage (%) c (c/b)	A1 d (d/c)	A2 e (e/c)	f (f/c)	Cytology g (g/f)
FY 2011	221	198 (89.6)	197 ( 99.5)	12 ( 6.1)	44 (22.3)	141 (71.6)	91 ( 64.5)		
FY 2012	988	917 (92.8)	892 ( 97.3)	53 ( 5.9)	245 (27.5)	594 (66.6)	261 (43.9)		
FY 2013	1,032	936 (90.7)	896 ( 95.7)	51 ( 5.7)	268 (29.9)	577 (64.4)	167 (28.9)		
Total	2,241	2,051 (91.5)	1,985 ( 96.8)	116 ( 5.8)	557 (28.1)	1,312 (66.1)	519 ( 39.6)		

Table 3. Confirmatory testing coverage and results as of 31 October 2014

Priority was given to those in urgent clinical need.

Those confirmed within the range of A1 and A2 (including those with other thyroid conditions) were advised to take their next regularly scheduled examination.

Those who require 6- or 12-month follow-up provided by health insurance and those beyond the specified level of A2 were categorized as "Follow-up advised".

## 2.2 Fine Needle Aspiration Biopsy and Cytology (FNAC)

2.2-1 Aspiration biopsy cytology results as of 31 October 2014

Those who were not diagnosed as suspicious or malignant were recommended for 6- to 12-months follow-up.

## Target municipalities in FY 2011

Suspicious or malignant	15 (15 surgical cases: 1 of benign thyroid nodules; 13 of papillary thyroid
	carcinoma;
	1 poorly differentiated thyroid carcinoma)
Male to female ratio	5:10
Mean age (SD, min-max)	17.3 (2.0, 13-20)
	15.7 (1.9, 11-18) at the time of the disaster
Mean tumor size	14.1 mm (6.6 mm, 6.0-33.0 mm)

## Target municipalities in FY 2012

Suspicious or malignant	56 (50 surgical cases: 49 of papillary thyroid carcinoma ;
	1 poorly differentiated thyroid carcinoma)
Male to female ratio	21:35
Mean age (SD, min-max)	17.2 (2.7, 8-21)
	14.9 (2.6, 6-18) at the time of the disaster
Mean tumor size	14.5 mm (7.8 mm, 5.2-40.5 mm)

## Target municipalities in FY 2013

Suspicious or malignant	38 (20 surgical cases: 19 of papillary thyroid carcinoma;
	1 poorly differentiated thyroid carcinoma)
Male to female ratio	12:26
Mean age (SD, min-max)	17.2 (3.0, 11-21)
	14.4 (2.8, 8-18 at the time of the disaster)
Mean tumor size	13.4 mm (7.0 mm, 5.1-35.9 mm)

## Total for cases FY 2011 - FY 2013

Suspicious or malignant	109 (85 surgical cases: 1 of benign thyroid nodules; 81 of papillary thyroid
	carcinoma;
	3 poorly differentiated thyroid carcinoma)
Male to female ratio	38:71
Mean age(SD, min-max)	17.2 (2.7, 8-21)
	14.8 (2.6, 6-18) at the time of the disaster
Mean tumor size	14.1 mm (7.3 mm, 5.1-40.5 mm)

#### 2.2-2 Suspicious or malignant cases on FNAC by age and sex

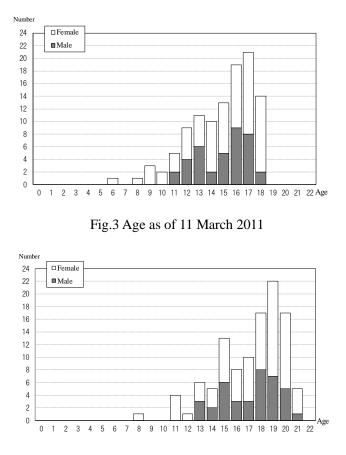


Fig. 4 Age as the date of confirmatory examination

## 2.2-3 Suspicious or malignant cases on FNAC by estimated radiation dose

Sixty-two of the 109 cases (56.9%) participated in the Basic Survey (radiation dose estimates) and 58 of them, including 5 with less than four months' data, have received the results. Among those, 40 (69.0%) had estimated radiation exposure dose below 1 mSv, and the highest effective dose was 2.2 mSv.

Table 5. Number of	Table 5. Number of suspicious or malignant cases by age and sex         As of 31 October 2014							
Effective dose	Sex	Age at the time of disaster						
(mSv)	SCA	0-5	6-10	11-15	16-18	Total		
<0.5	Male	0	0	2	4(1)	6(1)		
<0.5	Female	0	4(1)	6	10(2)	20(3)		
0510	Male	0	0	4(1)	2	6(1)		
0.5-1.0	Female	0	1	1	6	8		
1.0-1.5	Male	0	0	2	2	4		
1.0-1.5	Female	0	0	5	1	6		
15.2.0	Male	0	0	1	0	1		
1.5-2.0	Female	0	0	4	2	6		
20.25	Male	0	0	1	0	1		
2.0-2.5	Female	0	0	0	0	0		
Total	Male	0	0	10(1)	8(1)	18(2)		
Total	Female	0	5(1)	16	19(2)	40(3)		

Numbers inside the brackets are estimates for participants with less than four months' data.

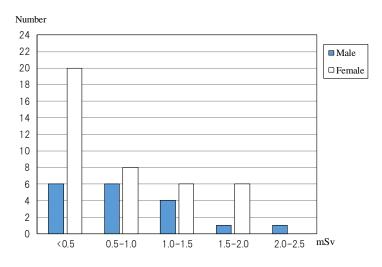


Fig. 5 Effective dose of the respondents

## 2.2-4 Blood and urinary iodine test results as of 31 October 2014

Table 6. Blood test results Mean±SD (Abnormality ratio)

	FT4 1) (ng/dL)	FT3 2) (pg/mL)	TSH 3) (μIU/mL)	Tg 4) (ng/mL)	TgAb 5) (IU/mL)	TPOAb 6) (IU/mL)
Reference Range	0.95-1.74	2.13-4.07 7)	0.340-3.880	<u>&lt;</u> 32.7	<28.0	<16.0
109 suspicious or malignant	1.2 <u>+</u> 0.2 (6.4%)	3.4 <u>+</u> 0.4 (5.5%)	1.3 <u>+</u> 0.7 (5.5%)	38.2 <u>+</u> 78.1 (34.9%)	- (27.5%)	- (15.6%)
Other 1,874	1.3 <u>+</u> 0.3 (7.3%)	3.6 <u>+</u> 0.9 (6.1%)	1.8 <u>+</u> 12.3 (8.4%)	33.8 <u>+</u> 183.7 (17.7%)	- (13.2%)	- (9.6%)

Table 7. Urinary iodine (µg/day)

	Minimum	25th percentile	Median	75th percentile	Maximum
109 suspicious or malignant	42	134	226	368.5	6,020
Other 1,871	24	120	196	368	35,700

1) FT4: Free Thyroxine; higher among patients with Graves' disease and lower with Hashimoto's disease.

2) FT3: Free Triiodothyronine; higher among patients with Graves' disease and lower with Hashimoto's disease.

3) TSH: Thyroid Stimulating Hormone; higher among patients with Hashimoto's disease and lower with Graves' disease.

4) Tg: Thyroglobulin; higher when thyroid tissue is destroyed or when thyroid cancer produces thyroglobulin.

5) TgAb: Anti-Thyroglobulin Antibody; higher among patients with Hashimoto's disease and Graves' disease.

6) TPOAb: Anti-Thyroid Peroxidase Antibody; higher among patients with Hashimoto's disease or Graves' disease.

7) Reference range differs according to age.

#### 2.2-5 Confirmatory test results by municipality as of 31 October 2014

The proportion of suspicious or malignant is 0.03% in FY 2011 target municipalities (13 municipalities in the nationally designated evacuation zones), 0.04% in FY 2012 target municipalities (12 towns of the Kenchu area), and 0.03% in FY 2013 target municipalities (34 towns of the Iwaki, Kennan, and Aizu areas).

# Table 8.Confirmatory test results in FY 2011(13 municipalities in the nationally designated evacuation zones)

	Number of children screened	Number who required confirmatory test	Proportion who required confirmatory test (%)	Number who underwent confirmatory test	Suspicious or malignant cases <sup>1</sup>	Proportion of suspicious or malignant cases (%)
Kawamata	2,221	8	0.4	8	2	0.09
Namie	3,249	26	0.8	23	2	0.06
Iitate	943	6	0.6	6	0	0.00
Minami-soma	10,789	52	0.5	48	2	0.02
Date	10,605	50	0.5	45	2	0.02
Tamura	6,325	32	0.5	26	3	0.05
Hirono	838	5	0.6	4	0	0.00
Naraha	1,153	7	0.6	6	0	0.00
Tomioka	2,302	13	0.6	12	1	0.04
Kawauchi	280	4	1.4	4	1	0.36
Okuma	1,973	14	0.7	13	1	0.05
Futaba	949	3	0.3	2	0	0.00
Katsurao	183	1	0.5	1	0	0.00
Subtotal	41,810	221	0.5	198	14	0.03

1) Excluding one suspected case found benign by aspiration biopsy cytology.

## Confirmatory test results by municipality in FY 2012

	Number of children screened	Number who required confirmatory test	Proportion who required confirmatory test (%)	Number who underwent confirmatory test	Suspicious or malignant cases	Proportion of suspicious or malignant cases (%)
Fukushima	47,309	283	0.6	271	12	0.03
Nihonmatsu	8,857	57	0.6	54	5	0.06
Motomiya	5,234	29	0.6	29	3	0.06
Otama	1,373	7	0.5	7	2	0.15
Koriyama	54,063	458	0.8	413	25	0.05
Kori	1,874	14	0.7	13	0	0.00
Kunimi	1,437	15	1.0	13	0	0.00
Tenei	878	7	0.8	6	0	0.00
Shirakawa	10,811	61	0.6	59	6	0.06
Nishigo	3,618	30	0.8	26	1	0.03
Izumizaki	1,157	5	0.4	5	1	0.09
Miharu	2,730	22	0.8	21	1	0.04
Subtotal	139,341	988	0.7	917	56	0.04

	Number of children screened	Number who required confirmatory test	Proportion who required confirmatory test (%)	Number who underwent confirmatory test	Suspicious or malignant cases	Proportion of suspicious or malignant cases (%)
Iwaki*	47,918	429	0.9	394	21	0.04
Sukagawa	11,591	101	0.9	96	4	0.03
Soma	5,085	46	0.9	42	0	0.00
Kagamiishi	1,952	9	0.5	8	0	0.00
Shinchi	1,110	7	0.6	7	0	0.00
Nakajima	801	2	0.2	2	0	0.00
Yabuki	2,462	17	0.7	13	0	0.00
Ishikawa	2,086	11	0.5	10	1	0.05
Yamatsuri	776	3	0.4	2	0	0.00
Asakawa	1,070	12	1.1	10	0	0.00
Hirata	829	9	1.1	9	1	0.12
Tanagura	2,259	22	1.0	22	1	0.04
Hanawa	1,218	8	0.7	7	0	0.00
Samegawa	507	3	0.6	1	0	0.00
Ono	1,327	14	1.1	13	0	0.00
Tamakawa	986	10	1.0	8	0	0.00
Furudono	792	6	0.8	6	0	0.00
Hinoemata	61	0	0.0	0	0	0.00
Minami-aizu	1,809	16	0.9	15	0	0.00
Kaneyama	137	0	0.0	0	0	0.00
Showa	101	0	0.0	0	0	0.00
Mishima	129	1	0.8	1	0	0.00
Shimogo	691	10	1.4	9	1	0.14
Kitakata	5,727	46	0.8	40	0	0.00
Nishiaizu	638	5	0.8	4	0	0.00
Tadami	494	7	1.4	6	0	0.00
Inawashiro	1,881	13	0.7	12	1	0.05
Bandai	414	4	1.0	3	0	0.00
Kitashiobara	385	1	0.3	1	0	0.00
Aizumisato	2,551	26	1.0	23	0	0.00
Aizubange	2,080	25	1.2	23	1	0.05
Yanaizu	375	2	0.5	2	0	0.00
Aizuwakamatsu	14,685	160	1.1	140	6	0.04
Yugawa	508	7	1.4	7	1	0.20
Subtotal	115,435	1,032	0.9	936	38	0.03
Total	296,586	2,241	0.8	2,051	108	0.04

Confirmatory test results by municipality in FY 2013

\* Including districts of FY 2012

## 3. Primary and confirmatory test results by municipality (Interim report)

In order to compare the results by municipality, we divided the area into three regions, Hamadori, Nakadori, and Aizu. Hamadori and Nakadori are divided into 13 municipalities in the nationally designated evacuation zones and otherwise.

The below is the interim report since the results of the Confirmatory Examination in Aizu area are not fully available yet.

Table 9. Proportion of B or C test results, and susp	icious o	or ma	lignant (Interim 1	report)		As of 31 October 2014		
			13 municipalities	Nakadori <sup>15</sup>	Hamadori <sup>16</sup>	Aizu <sup>17</sup>	Total	
Target population			47,768	199,456	70,535	49,927	367,686	
Number of participants of Primary Examination	A <sup>10</sup>		41,810	167,825	54,006	32,612	296,253	
Mean age (SD) Total			10.4 (5.3)	10.7 (5.1)	11.1 (4.9)	11.1 (4.5)	-	
Mean age (SD) Female			10.4 (5.3)	10.8 (5.2)	11.3 (5.0)	11.3 (4.6)	-	
Mean age (SD) Male			10.3 (5.2)	10.5 (5.1)	10.9 (4.9)	10.9 (4.4)	-	
Female (%)		%	49.6	49.3	50.0	49.7	49.5	
B or C test results	В		221	1,215	482	323	2,241	
Proportion of B or C test results	(B/A)	%	0.53	0.72	0.89	0.99	0.76	
Number of participants of Confirmatory Examination	C <sup>11</sup>		197	1,090	427	271	1,985	
Proportion of participants	(C/B)	%	89.1	89.7	88.6	83.9	88.6	
Participants of FNAC	D 12		94	293	93	45	525	
Proportion of participants of Confirmatory Examination	(D/C)	%	47.7	26.9	21.8	16.6	26.4	
Proportion of participants of Primary Examination	(D/A)	%	0.22	0.17	0.17	0.14	0.18	
Number of suspicious or malignant	E 13		14	63	21	10	108	
Proportion	(E/D)	%	14.9	21.5	22.6	22.2	20.6	
Proportion per 100,000	(E/A)		33.5	37.5	38.9	30.7	36.5	
		%	(0.033)	(0.038)	(0.039)	(0.031)	(0.036)	

10) Excluding duplicates and unconfirmed results.

11) Excluding number of unconfirmed test results.

12) Number of those who underwent FNAC including A1 and A2 test results among participants of Confirmatory Examination.

13) Excluding one suspected case found benign by aspiration biopsy cytology.

14) Tamura, Minami-soma, Date, Kawamata, Hirono, Naraha, Tomioka, Kawauchi, Okuma, Futaba, Namie, Katsurao, Iitate

15) Fukushima, Koriyama, Shirakawa, Sukagawa, Nihonmatsu, Motomiya, Kori, Kunimi, Otama, Kagamiishi, Tenei, Nishigo, Izumizaki, Nakajima, Yabuki, Tanagura, Yamatsuri, Hanawa, Samegawa, Ishikawa, Tamakawa, Hirata, Asakawa, Furudono, Miharu, Ono

16) Iwaki, Soma, Shinchi

17) Aizuwakamatsu, Kitakata, Shimogo, Hinoemata, Tadami, Minami-aizu, Kitashiobara, Nishiaizu, Bandai, Inawashiro, Aizubange, Yugawa, Yanaizu, Mishima, Kaneyama, Showa, Aizumisato

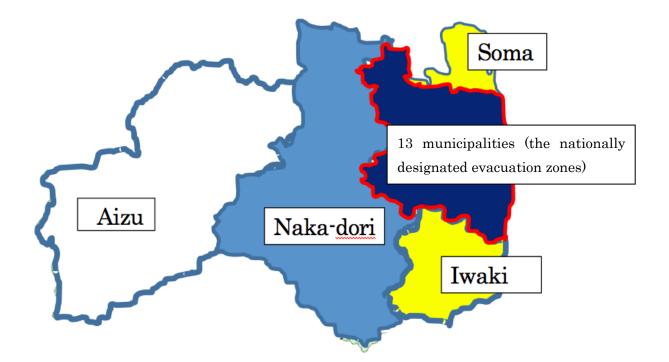
#### Summary

Among the 296,253 participants of Primary Examination excluding duplicates and unconfirmed test results, proportion of B or C test results increased in all areas, and was highest in Aizu followed by Hamadori, Nakadori, and 13 municipalities of the nationally designated evacuation zones. The proportion of suspicious or malignant was almost the same among 13 municipalities in the nationally designated evacuation zones, Nakadori, and Hamadori, but lower in Aizu since the proportion of those completed the Confirmatory Examination is lower.

FY 2011 is from 1 April 2011 through 31 March 2012.

FY 2012 is from 1 April 2012 through 31 March 2013.

FY 2013 is from 1 April 2013 through 31 March 2014.



## Appendix 1

	Target Population		Age		
	Target Population	0-5	6-10	11-15	16-18
2011					
Kawamata	2,394	588	631	719	4
Namie	3,643	1,023	920	1,031	6
litate	1,084	281	300	301 3,297	2
Minami-soma Date	12,526	3,697 2,755	3,418 3,023	3,401	2,1
Tamura	7,068	1,738	1,807	2,073	1,4
Hirono	1,077	258	250	348	2
Naraha	1,432	351	362	415	3
Tomioka	2,962	767	740	897	5
Kawauchi	357	90	99	89	
Okuma	2,385	782	634	619	3
Futaba	1,207	369	300	337	2
Katsurao	233	12 755	62	12 504	0.0
Subtotal 7 2012	47,768	12,755	12,546	13,594	8,8
Fukushima	53,555	15,250	14,062	14,880	9,3
Nihonmatsu	10,256	2,784	2,646	2,945	1,8
Motomiya	6,112	1,760	1,583	1,691	1,0
Otama	1,617	486	399	430	3
Koriyama	64,383	19,216	16,911	17,497	10,7
Kori	2,065	526	547	595	3
Kunimi	1,594	381	420	484	3
Tenei	1,061	300	284	280	1
Shirakawa	12,161	3,357	3,258	3,478	2,0
Nishigo	3,977	1,143	1,081	1,075	6
Izumizaki	1,289	353	355	335	2
Miharu	3,067	750	776	931	6
Subtotal	161,137	46,306	42,322	44,621	27,8
2013					
Iwaki*	62,289	17,231	16,181	17,755	11,1
Sukagawa	15,308	4,344	4,096	4,255	2,6
Soma	6,813	1,981	1,778	1,849	1,2
Kagamiishi Shinchi	2,597	740 391	707 394	723	4
Nakajima	1,433	270	282	317	2
Yabuki	3,277	981	850	896	5
Ishikawa	2,848	711	722	831	5
Yamatsuri	1,010	287	236	315	1
Asakawa	1,340	340	379	372	2
Hirata	1,208	329	298	342	2
Tanagura	2,988	867	744	882	4
Hanawa	1,662	415	391	531	3
Samegawa	694	178	172	186	1
Ono	1,936	496	490	568	3
Tamakawa	1,332	384	347	369	2
Furudono	1,040	287	242	315	1
Hinoemata	107	23	30	34	
Minami-aizu	2,823	713	682	841	5
Kaneyama	203	40	52	72	
Showa Mishima	128	44	38	33	
Shimogo	192	265	55 252	53 293	1
Kitakata	8,910	2,293	2,334	293	1,7
Nishiaizu	1,019	2,293	2,334	334	2
Tadami	710	195	177	201	1
Inawashiro	2,662	704	659	768	5
Bandai	617	180	163	166	1
Kitashiobara	557	159	140	156	1
Aizumisato	3,658	916	909	1,098	7
Aizubange	3,081	766	800	958	5
Yanaizu	590	158	142	175	1
Aizuwakamatsu	22,987	6,261	5,965	6,578	4,1
Yugawa	676	179	177	192	1
		43,387	41,129	45,447	28,8

\* Including districts of FY 2012

Because of the duplication of the participants, some numbers are not consistent with the previous ones.

#### Appendix 2

#### Thyroid Ultrasound Examination (TUE) coverage by municipality

Screening coverage	by municipality in FY	2011 (13 municipalities in th	e nationally designated zones)
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As of 31 October 2014

	Target Population	Parti	cipants Screened outside Fukushima	Proportion (%)	Number and	d proportion of	participants by	age group	Participants living outside Fukushima	Proportion (%)
	а	b	5)	b/a	0-5	6-10	11-15	16-18	C 4)	c/b
					560	612	687	362	1)	
Kawamata	2,394	2,221	34	92.8	95.2	97.0	95.5	79.4	2) 123	5.5
					25.2	27.6	30.9	16.3	3)	
					920	858	918	553		
Namie	3,643	3,249	192	89.2	89.9	93.3	89.0	82.7	1,189	36.6
					28.3	26.4	28.3	17.0		
					248	271	264	160		
Iitate	1,084	943	16	87.0	88.3	90.3	87.7	79.2	88	9.3
					26.3	28.7	28.0	17.0		
					3,205	3,052	2,929	1,603		
Minami-soma	12,526	10,789	875	86.1	86.7	89.3	88.8	75.8	2,876	26.7
				-	29.7	28.3	27.1	14.9		
					2,573	2,977	3,287	1,768		
Date	11,400	10,605	155	93.0	93.4	98.5	96.6	79.6	575	5.4
					24.3	28.1	31.0	16.7		
	1				1,557	1,762	1,969	1,037		
Tamura	7,068	6,325	61	89.5	89.6	97.5	95.0	71.5	216	3.4
					24.6	27.9	31.1	16.4		
					204	216	294	124		
Hirono	1,077	838	57	77.8	79.1	86.4	84.5	56.1	151	18.0
	ŕ				24.3	25.8	35.1	14.8		
					285	319	353	196		
Naraha	1,432	1,153	77	80.5	81.2	88.1	85.1	64.5	225	19.5
	ŕ	,		-	24.7	27.7	30.6	17.0		
					594	638	720	350		
Tomioka	2,962	2,302	237	77.7	77.4	86.2	80.3	62.7	631	27.4
	,	,			25.8	27.7	31.3	15.2		
					72	92	70	46		
Kawauchi	357	280	22	78.4	80.0	92.9	78.7	58.2	53	18.9
					25.7	32.9	25.0	16.4		
					656	579	529	209		
Okuma	2,385	1,973	183	82.7	83.9	91.3	85.5	59.7	500	25.3
					33.2	29.3	26.8	10.6		
					289	246	277	137		
Futaba	1,207	949	113	78.6	78.3	82.0	82.2	68.2	424	44.7
	ŕ				30.5	25.9	29.2	14.4		
	1				43	55	57	28		-
Katsurao	233	183	3	78.5	76.8	88.7	85.1	58.3	15	8.2
					23.5	30.1	31.1	15.3		
					11,206	11,677	12,354	6,573		
Subtotal	47,768	41,810	2,025	87.5	87.9	93.1	90.9	74.1	7,066	16.9
	.,	,	,,		26.8	27.9	29.5	15.7	.,	

1) Number of participants. 2) Number of participants/Number in the target population age group.

3) Number of participants in the age group/Number of participants.

4) Number of participants currently living outside Fukushima.

5) Number of participants who underwent the test outside Fukushima.

Because of the duplication of the participants, some numbers are not consistent with the previous ones.

Fractions have been rounded and may not total to100%. Ages are at the time of the disaster.

While some participants who underwent the test at their schools had been categorized according to the municipalities of their schools in the previous

survey, they were categorized into the municipalities they belonged at the time of the disaster.

Screening coverage	by	municipality	in	FY	2012
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#### As of 31 October 2014

	Target Population	Partic	cipants Screened outside Fukushima	Proportion (%)	Number and	l proportion of	participants by	age group	Participants living outside Fukushima	Proportion (%)
	а	b	5)	b/a	0-5	6-10	11-15	16-18	C 4)	c/b
		-		0.1	13,372	13,565	13,670	6,702		
Fukushima	53,555	47,309	1,238	88.3	87.7	96.5	91.9	71.6	3,553	7.5
					28.3	28.7	28.9	14.2		
					2,528	2,589	2,672	1,068		
Nihonmatsu	10,256	8,857	174	86.4	90.8	97.8	90.7	56.8	439	5.0
					28.5	29.2	30.2	12.1		
					1,534	1,554	1,506	640		
Motomiya	6,112	5,234	110	85.6	87.2	98.2	89.1	59.4	228	4.4
					29.3	29.7	28.8	12.2		
					447	397	385	144		
Otama	1,617	1,373	18	84.9	92.0	99.5	89.5	47.7	42	3.1
					32.6	28.9	28.0	10.5		
					16,317	16,148	15,492	6,106		
Koriyama	64,383	54,063	2,217	84.0	84.9	95.5	88.5	56.8	3,795	7.0
					30.2	29.9	28.7	11.3		
					494	541	570	269		
Kori	2,065	1,874	34	90.8	93.9	98.9	95.8	67.8	68	3.6
					26.4	28.9	30.4	14.4		
					349	412	464	212		
Kunimi	1,594	1,437	29	90.2	91.6	98.1	95.9	68.6	53	3.7
					24.3	28.7	32.3	14.8		
					285	281	229	83		
Tenei	1,061	878	13	82.8	95.0	98.9	81.8	42.1	31	3.5
					32.5	32.0	26.1	9.5		
					3,083	3,193	3,242	1,293		
Shirakawa	12,161	10,811	296	88.9	91.8	98.0	93.2	62.5	599	5.5
					28.5	29.5	30.0	12.0		
					1,089	1,062	1,012	455		
Nishigo	3,977	3,618	83	91.0	95.3	98.2	94.1	67.1	197	5.4
					30.1	29.4	28.0	12.6		
					339	346	311	161		
Izumizaki	1,289	1,157	14	89.8	96.0	97.5	92.8	65.4	44	3.8
					29.3	29.9	26.9	13.9		
					696	760	859	415		
Miharu	3,067	2,730	40	89.0	92.8	97.9	92.3	68.0	105	3.8
					25.5	27.8	31.5	15.2		
					40,533	40,848	40,412	17,548		
Subtotal	161,137	139,341	4,266	86.5	87.5	96.5	90.6	62.9	9,154	6.6
					29.1	29.3	29.0	12.6		

Screening coverage	by municipality i	n FY 2013							As of 31	October 2014
	Target Population	Screened outside Fukushima		Proportion (%)	Number an	d proportion gro	n of participar up	nts by age	Participants living outside Fukushima	Proportion (%)
	а	b	5)	b/a	0-5	6-10	11-15	16-18	C 4)	c/b
Iwaki*	62,289	47,918	1,617	76.9	13,825 80.2	15,450 95.5	13,864 78.1	4,779 43.0	2,163	4.5
Sukagawa	15,308	11,591	253	75.7	28.9 3,615 83.2	32.2 3,968 96.9	28.9 3,060 71.9	10.0 948 36.3	332	2.9
Soma	6,813	5,085	226	74.6	31.2 1,658 83.7 32.6	34.2 1,656 93.1 32.6	26.4 1,324 71.6 26.0	8.2 447 37.1 8.8	339	6.7
Kagamiishi	2,597	1,952	33	75.2	611 82.6 31.3	684 96.7 35.0	20.0 507 70.1 26.0	<u> </u>	42	2.2
Shinchi	1,433	1,110	63	77.5	31.3 341 87.2 30.7	33.0 377 95.7 34.0	20.0 300 73.0 27.0	92 38.8 8.3	52	4.7
Nakajima	1,079	801	9	74.2	226 83.7 28.2	273 96.8 34.1	21.0 248 78.2 31.0	<u>54</u> 25.7 6.7	12	1.5
Yabuki	3,277	2,462	53	75.1	869 88.6 35.3	828 97.4 33.6	625 69.8 25.4	140 25.5 5.7	53	2.2
Ishikawa	2,848	2,086	53	73.2	659 92.7 31.6	684 94.7 32.8	589 70.9 28.2	154 26.4 7.4	48	2.3
Yamatsuri	1,010	776	17	76.8	268 93.4 34.5	233 98.7 30.0	226 71.7 29.1	49 28.5 6.3	19	2.4
Asakawa	1,340	1,070	25	79.9	316 92.9 29.5	371 97.9 34.7	297 79.8 27.8	86 34.5 8.0	27	2.5
Hirata	1,208	829	13	68.6	273 83.0 32.9	284 95.3 34.3	215 62.9 25.9	57 23.8 6.9	10	1.2
Tanagura	2,988	2,259	41	75.6	754 87.0 33.4	730 98.1 32.3	622 70.5 27.5	153 30.9 6.8	50	2.2
Hanawa	1,662	1,218	26	73.3	368 88.7 30.2	382 97.7 31.4	371 69.9 30.5	97 29.8 8.0	26	2.1
Samegawa	694	507	14	73.1	171 96.1 33.7	170 98.8 33.5	128 68.8 25.2	38 24.1 7.5	16	3.2
Ono	1,936	1,327	34	68.5	395 79.6 29.8	468 95.5 35.3	358 63.0 27.0	106 27.7 8.0	29	2.2
Tamakawa	1,332	986	12	74.0	341 88.8 34.6	339 97.7 34.4	241 65.3 24.4	65 28.0 6.6	13	1.3
Furudono	1,040	792	23	76.2	263 91.6 33.2	239 98.8 30.2	233 74.0 29.4	57 29.1 7.2	23	2.9

Screening coverage by municipality in FY 2013

As of 31 October 2014

\*Including districts of FY 2012

	Target Population	Participants Screened outside Fukushima		Proportion (%)		gro		Participants living outside Fukushima	Proportion (%)	
	а	b	5)	b/a	0-5	6-10	11-15	16-18	C 4)	c/b
					15	27	19	0		
Hinoemata	107	61	3	57.0	65.2	90.0	55.9	0.0	3	4.9
					24.6	44.3	31.1	0.0		
					605	641	457	106		
Minami-aizu	2,823	1,809	22	64.1	84.9	94.0	54.3	18.1	32	1.3
					33.4	35.4	25.3	5.9		
					34	50	47	6		
Kaneyama	203	137	7	67.5	85.0	96.2	65.3	15.4	6	4.4
					24.8	36.5	34.3	4.4		
					37	38	25	1		
Showa	128	101	0	78.9	84.1	100.0	75.8	7.7	4	4.0
					36.6	37.6	24.8	1.0		
					29	54	37	9		
Mishima	192	129	1	67.2	67.4	98.2	69.8	22.0	0	0.0
					22.5	41.9	28.7	7.0		
					243	233	177	38		
Shimogo	1,007	691	13	68.6	91.7	92.5	60.4	19.3	15	2.1
					35.2	33.7	25.6	5.5		
					1,635	2,232	1,485	375		
Kitakata	8,910	5,727	68	64.3	71.3	95.6	57.6	22.0	83	1.4
					28.5	39.0	25.9	6.5		
					201	238	172	27		
Nishiaizu	1,019	638	4	62.6	93.1	97.1	51.5	12.1	6	0.
					31.5	37.3	27.0	4.2		
					161	169	147	17		
Tadami	710	494	4	69.6	82.6	95.5	73.1	12.4	4	0.8
					32.6	34.2	29.8	3.4		
					612	643	481	145		
Inawashiro	2,662	1,881	34	70.7	86.9	97.6	62.6	27.3	63	3.
					32.5	34.2	25.6	7.7		
					133	159	94	28		
Bandai	617	414	9	67.1	73.9	97.5	56.6	25.9	11	2.
					32.1	38.4	22.7	6.8		
					144	137	93	11		
Kitashiobara	557	385	9	69.1	90.6	97.9	59.6	10.8	8	2.
					37.4	35.6	24.2	2.9		
					827	873	686	165		
Aizumisato	3,658	2,551	25	69.7	90.3	96.0	62.5	22.4	39	1.
					32.4	34.2	26.9	6.5		
					613	752	576	139		
Aizubange	3,081	2,080	29	67.5	80.0	94.0	60.1	25.0	33	1.
					29.5	36.2	27.7	6.7		
					127	129	103	16		
Yanaizu	590	375	3	63.6	80.4	90.8	58.9	13.9	3	0.
					33.9	34.4	27.5	4.3		
					4,155	5,639	4,029	862		
Aizuwakamatsu	22,987	14,685	320	63.9	66.4	94.5	61.2	20.6	399	2.
					28.3	38.4	27.4	5.9		
					166	177	128	37		
Yugawa	676	508	7	75.1	92.7	100.0	66.7	28.9	8	1.
					32.7	34.8	25.2	7.3		
					34,690	39,327	31,964	9,454		
Subtotal	158,781	115,435	3,070	72.7	80.0	95.6	70.3	32.8	3,971	3.4
					30.1	34.1	27.7	8.2		

					86,429	91,852	84,730	33,575		
Total	367,686	296,586	9,361	80.7	84.4	95.7	81.7	51.2	20,191	6.8
					29.1	31.0	28.6	11.3		

## Appendix 3 Thyroid Ultrasound Examination (TUE) coverage by prefecture

							As of 31 C	October 2014
Prefecture	Number of test venues	Participants	Prefecture	Number of test venues	Participants	Prefecture	Number of test venues	Participants
Hokkaido	4	332	Fukui	1	22	Hiroshima	1	37
Aomori	1	162	Yamanashi	1	82	Yamaguchi	1	24
Iwate	3	186	Nagano	2	132	Tokushima	1	10
Miyagi	2	1,519	Gifu	1	43	Kagawa	1	29
Akita	1	208	Shizuoka	2	110	Ehime	1	23
Yamagata	3	454	Aichi	3	179	Kōchi	1	14
Ibaraki	4	439	Mie	1	38	Fukuoka	2	81
Tochigi	5	448	Shiga	1	20	Saga	1	7
Gunma	1	185	Kyōto	3	97	Nagasaki	2	25
Saitama	1	249	Ōsaka	6	210	Kumamoto	1	25
Chiba	3	279	Hyōgo	1	135	Ōita	1	35
Tōkyō	12	1,757	Nara	1	25	Miyazaki	1	35
Kanagawa	4	745	Wakayama	1	13	Kagoshima	1	30
Niigata	1	614	Tottori	1	15	Okinawa	1	117
Toyama	1	34	Shimane	1	13			
Ishikawa	1	45	Okayama	3	79	Total	92	9,361

Participants underwent testing at venues outside Fukushima carried out either by Fukushima Medical University staff (twice in Niigata and Kanagawa respectively, and three times in Yamagata) or by local specialists.

## Appendix 4

mary test results in F		Number		Number by	test results				As of 31 O	
	Participants	confirmed		Proporti			Nod	ules	Су	sts
	raiucipants	b	A				Proport	ion (%)	Proport	ion(%)
	а	Proportion (%) b/a (%)	A1	A2	В	С	<u>&gt;</u> 5.1mm	<u>&lt;</u> 5.0mm	<u>&gt;</u> 20.1mm	<u>&lt;</u> 20.0m
Vt-	0.001	2,221	1,520	693	8	0	8	17	0	6
Kawamata	2,221	100.0	68.4	31.2	0.4	0.0	0.4	0.8	0.0	3(
Namia	2.240	3,249	2,119	1,104	26	0	26	42	0	1,0
Namie	3,249	100.0	65.2	34.0	0.8	0.0	0.8	1.3	0.0	3
<b>T</b> *4 4	0.10	943	693	244	6	0	6	15	0	2
Iitate	943	100.0	73.5	25.9	0.6	0.0	0.6	1.6	0.0	2
	10 500	10,789	6,789	3,948	52	0	52	87	0	3,9
Minami-soma	10,789	100.0	62.9	36.6	0.5	0.0	0.5	0.8	0.0	3
	10.00	10,605	6,748	3,807	50	0	48	31	1	3,8
Date	10,605	100.0	63.6	35.9	0.5	0.0	0.5	0.3	0.0	3
		6,325	4,000	2,293	32	0	32	11	0	2,
Tamura	6,325	100.0	63.2	36.3	0.5	0.0	0.5	0.2	0.0	3
		838	521	312	5	0	5	3	0	1
Hirono	838	100.0	62.2	37.2	0.6	0.0	0.6	0.4	0.0	3
		1,153	651	495	7	0	7	4	0	
Naraha	1,153	100.0	56.5	42.9	0.6	0.0	0.6	0.3	0.0	4
		2,302	1,350	939	13	0	13	8	0	
Tomioka	2,302	100.0	58.6	40.8	0.6	0.0	0.6	0.3	0.0	4
		280	156	120	4	0	4	1	0	
Kawauchi	280	100.0	55.7	42.9	1.4	0.0	1.4	0.4	0.0	4
		1,973	1,140	819	14	0	14	7	0	
Okuma	1,973	100.0	57.8	41.5	0.7	0.0	0.7	0.4	0.0	4
		949	570	376	3	0	3	3	0	
Futaba	949	100.0	60.1	39.6	0.3	0.0	0.3	0.3	0.0	3
		183	116	66	1	0	1	3	0	
Katsurao	183	100.0	63.4	36.1	0.5	0.0	0.5	1.6	0.0	3
0.14.4.1	41.040	41,810	26,373	15,216	221	0	219	232	1	15,
Subtotal	41,810	100.0	63.1	36.4	0.5	0.0	0.5	0.6	0.0	3

#### Thyroid Ultrasound Examination (TUE) results by municipality Primary test results in FY 2011 (13 municipalities in the nationally designated zones)

Fractions are rounded and may not total to 100%.

Because of the duplication of the participants, some numbers are not consistent with the previous ones.

Fractions have been rounded and may not total to100%. Ages are at the time of the disaster.

While some participants who underwent the test at their schools had been categorized according to the municipalities of their schools in the previous

survey, they were categorized into the municipalities they belonged at the time of the disaster.

Primary test results in	FY 2012								As of 31 O	ctober 2014
		Number confirmed		Number by	test results		Nod	ulaa	C.	rata
	Participants	b		Proport	ion (%)		Nou	ules	Cysts	
	1		A	1			Proport	ion (%)	Proport	ion (%)
	а	Proportion (%) b/a (%)	A1	A2	В	С	<u>&gt;</u> 5.1mm	<u>&lt;</u> 5.0mm	<u>&gt;</u> 20.1mm	<u>&lt;</u> 20.0mm
Fukushima	47,309	47,309	26,964	20,062	283	0	276	196	3	20,079
1 ukusiiinia	47,309	100.0	57.0	42.4	0.6	0.0	0.6	0.4	0.0	42.4
Nihonmatsu	8,857	8,857	5,198	3,602	56	1	56	46	1	3,605
minoninatsu	0,037	100.0	58.7	40.7	0.6	0.0	0.6	0.5	0.0	40.7
Motomiya	5,234	5,234	2,955	2,250	29	0	27	25	1	2,254
Wiotoniiya	5,254	100.0	56.5	43.0	0.6	0.0	0.5	0.5	0.0	43.1
Otarra	1 272	1,373	816	550	7	0	7	8	0	550
Otama	1,373	100.0	59.4	40.1	0.5	0.0	0.5	0.6	0.0	40.1
Variana	54.062	54,000	27,894	25,648	458	0	454	332	3	25,731
копуата	Koriyama 54,063	99.9	51.7	47.5	0.8	0.0	0.8	0.6	0.0	47.7
Kori	1.074	1,871	1,024	833	14	0	14	9	0	834
KOTI	1,874	99.8	54.7	44.5	0.7	0.0	0.7	0.5	0.0	44.6
17	1 407	1,436	763	658	15	0	14	9	1	662
Kunimi	1,437	99.9	53.1	45.8	1.0	0.0	1.0	0.6	0.1	46.1
	070	878	528	343	7	0	7	4	0	348
Tenei	878	100.0	60.1	39.1	0.8	0.0	0.8	0.5	0.0	39.6
G1 : 1	10.011	10,808	6,109	4,638	61	0	61	54	0	4,635
Shirakawa	10,811	100.0	56.5	42.9	0.6	0.0	0.6	0.5	0.0	42.9
NT: 1 '	2 (10	3,618	2,085	1,503	30	0	30	21	0	1,503
Nishigo	3,618	100.0	57.6	41.5	0.8	0.0	0.8	0.6	0.0	41.5
× · · ·		1,156	523	628	5	0	5	11	0	624
Izumizaki	1,157	99.9	45.2	54.3	0.4	0.0	0.4	1.0	0.0	54.0
		2,729	1,301	1,406	22	0	22	15	0	1,409
Miharu	2,730	100.0	47.7	51.5	0.8	0.0	0.8	0.5	0.0	51.6
0.11	100.511	139,269	76,160	62,121	987	1	973	730	9	62,234
Subtotal	139,341	99.9	54.7	44.6	0.7	0.0	0.7	0.5	0.0	44.7

rimary test results in	FY 2013								As of 31 O	ctober 2014		
		Number confirmed		Number by	test results		Nod	ulos	C	sts		
	Participants			Proporti	ion (%)		Nou	ules	Cy	818		
	1		A	\				Proportion (%)		Proportion (%)		
	а	Proportion (%) b/a (%)	A1	A2	В	С	<u>≥</u> 5.1mm	<u>&lt;</u> 5.0mm	<u>&gt;</u> 20.1mm	<u>≤</u> 20.0mm		
Iwaki*	47,918	47,820	21,059	26,332	429	0	428	278	1	26,440		
Iwaki	47,918	99.8	44.0	55.1	0.9	0.0	0.9	0.6	0.0	55.3		
Sukagawa	11,591	11,538	5,259	6,178	101	0	101	51	0	6,212		
Sukagawa	11,591	99.5	45.6	53.5	0.9	0.0	0.9	0.4	0.0	53.8		
Soma	5,085	5,077	2,414	2,617	46	0	46	45	0	2,628		
Solin	5,005	99.8	47.5	51.5	0.9	0.0	0.9	0.9	0.0	51.8		
Kagamiishi	1,952	1,947	919	1,019	9	0	9	8	0	1,020		
Ruguninsin	1,752	99.7	47.2	52.3	0.5	0.0	0.5	0.4	0.0	52.4		
Shinchi	1,110	1,109	505	597	7	0	7	5	0	601		
Shinein	1,110	99.9	45.5	53.8	0.6	0.0	0.6	0.5	0.0	54.2		
Nakajima	801	801	377	422	2	0	2	8	0	420		
Taxajiina	001	100.0	47.1	52.7	0.2	0.0	0.2	1.0	0.0	52.4		
Yabuki	2,462	2,454	1,043	1,394	17	0	17	8	0	1,402		
Tubuki	2,402	99.7	42.5	56.8	0.7	0.0	0.7	0.3	0.0	57.1		
Ishikawa	2,086	2,082	953	1,118	11	0	11	15	0	1,118		
Islinawa	2,000	99.8	45.8	53.7	0.5	0.0	0.5	0.7	0.0	53.7		
Yamatsuri	776	774	312	459	3	0	3	4	0	456		
Taniatsuri	770	99.7	40.3	59.3	0.4	0.0	0.4	0.5	0.0	58.9		
Asakawa	1,070	1,067	459	596	12	0	12	10	0	602		
A Sakawa	1,070	99.7	43.0	55.9	1.1	0.0	1.1	0.9	0.0	56.4		
Hirata	829	826	371	446	9	0	9	2	0	452		
IIIIuu	02)	99.6	44.9	54.0	1.1	0.0	1.1	0.2	0.0	54.7		
Tanagura	2,259	2,257	991	1,244	22	0	22	11	0	1,252		
Tunuguru	2,239	99.9	43.9	55.1	1.0	0.0	1.0	0.5	0.0	55.5		
Hanawa	1,218	1,211	490	713	8	0	8	9	0	716		
T fana wa	1,210	99.4	40.5	58.9	0.7	0.0	0.7	0.7	0.0	59.1		
Samegawa	507	504	235	266	3	0	3	4	0	266		
Sundana	507	99.4	46.6	52.8	0.6	0.0	0.6	0.8	0.0	52.8		
Ono	1,327	1,320	513	793	14	0	14	13	0	795		
Cho	1,527	99.5	38.9	60.1	1.1	0.0	1.1	1.0	0.0	60.2		
Tamakawa	986	984	438	536	10	0	10	6	0	540		
1 unminu o u	700	99.8	44.5	54.5	1.0	0.0	1.0	0.6	0.0	54.9		
Furudono	792	791	383	402	6	0	6	5	0	406		
1 01 000110	192	99.9	48.4	50.8	0.8	0.0	0.8	0.6	0.0	51.3		

\* Including districts of FY 2012

#### Primary test results in FY 2013

As of 31 October 2014

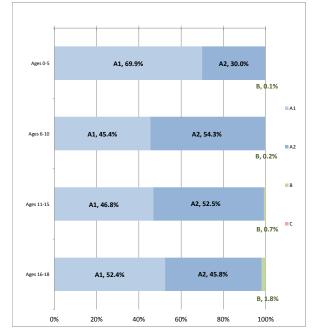
rimary test results in F	Y 2013								As of 31 Oc	ctober 2014	
		Number confirmed		Number by	test results		Nod	ules	Cysts		
	Participants			Proporti	on (%)				-,		
	i ui uoipunio		A	1			Proport	ion (%)	Proport	ion (%)	
	а	Proportion (%) b/a (%)	A1	A2	В	С	<u>&gt;</u> 5.1mm	<u>&lt;</u> 5.0mm	<u>&gt;</u> 20.1mm	<u>&lt;</u> 20.0mm	
		61	25	36	0	0	0	3	0	3	
Hinoemata	61	100.0	41.0	59.0	0.0	0.0	0.0	4.9	0.0	55	
	1 000	1,805	738	1,051	16	0	16	13	0	1,0	
Minami-aizu	1,809	99.8	40.9	58.2	0.9	0.0	0.9	0.7	0.0	58	
17	107	136	64	72	0	0	0	1	0		
Kaneyama	137	99.3	47.1	52.9	0.0	0.0	0.0	0.7	0.0	52	
		101	56	45	0	0	0	0	0	4	
Showa	101	100.0	55.4	44.6	0.0	0.0	0.0	0.0	0.0	44	
	100	129	38	90	1	0	1	0	0	9	
Mishima	129	100.0	29.5	69.8	0.8	0.0	0.8	0.0	0.0	70	
<i>a</i> 1.		690	318	362	10	0	10	4	0	30	
Shimogo	691	99.9	46.1	52.5	1.4	0.0	1.4	0.6	0.0	52	
		5,717	2,270	3,401	46	0	46	41	0	3,4	
Kitakata	5,727	99.8	39.7	59.5	0.8	0.0	0.8	0.7	0.0	59	
		638	243	390	5	0	5	5	0	3	
Nishiaizu	638	100.0	38.1	61.1	0.8	0.0	0.8	0.8	Propor ≥20.1mm 0 0 0 0 0 0 0 0 0 0 0 0 0	61	
		492	202	283	7	0	7	3	3 0 6 0.0	2	
Tadami	494	99.6	41.1	57.5	1.4	0.0	1.4	0.6		57	
T 1'	1.001	1,877	780	1,084	13	0	13	13	0	1,0	
Inawashiro	1,881	99.8	41.6	57.8	0.7	0.0	0.7	0.7	0.0	57	
Dandai	414	413	168	241	4	0	4	2	0	2	
Bandai	414	99.8	40.7	58.4	1.0	0.0	1.0	0.5	0.0	58	
		383	160	222	1	0	1	3	0	2	
Kitashiobara	385	99.5	41.8	58.0	0.3	0.0	0.3	0.8	0.0	58	
		2,548	1,060	1,462	26	0	26	17	0	1,4	
Aizumisato	2,551	99.9	41.6	57.4	1.0	0.0	1.0	0.7	0.0	57	
		2,079	842	1,212	25	0	25	9	0	1,2	
Aizubange	2,080	100.0	40.5	58.3	1.2	0.0	1.2	0.4	0.0	58	
		375	177	196	2	0	2	0	0	1	
Yanaizu	375	100.0	47.2	52.3	0.5	0.0	0.5	0.0	0.0	52	
		14,661	6,052	8,449	160	0	159	114	1	8,4	
Aizuwakamatsu	14,685	99.8	41.3	57.6	1.1	0.0	1.1	0.8	0.0	58	
		507	186	314	7	0	7	2	0	3	
Yugawa	508		36.7	61.9	1.4	0.0	1.4	0.4		62	
		115 174	50,100	64,042	1,032	0.0	1,030	712	2	64,3	
Subtotal	115,435	99.8	43.5	55.6	0.9	0.0	0.9	0.6		55	
		·/·.0	15.5	55.0	0.7	0.0	0.9	5.0	0.0	55	
		296,253	152,633	141,379	2,240	1	2,222	1,674	12	141,7	
Total	296,586	99.9	51.5	47.7	0.8	0.0	0.8	0.6		47	
		11.9	51.5	47.7	0.0	0.0	0.0	0.0	0.0	+/	

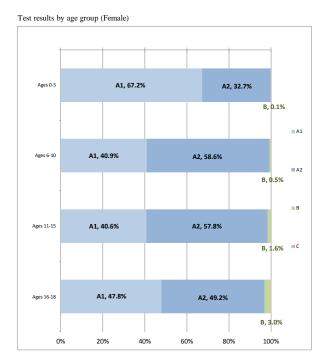
## Appendix 5

## 1. Thyroid Ultrasound Examination results by age and sex

														As of 31	October 2014
$\mathbf{N}$			I	1				В			С			Total	
		A1			A2						-				
Ages	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-5	30,969	28,259	59,228	13,278	13,733	27,011	41	57	98	0	0	0	44,288	42,049	86,337
6-10	21,413	18,296	39,709	25,589	26,180	51,769	116	236	352	0	0	0	47,118	44,712	91,830
11-15	19,908	17,075	36,983	22,354	24,301	46,655	316	654	970	0	0	0	42,578	42,030	84,608
16-18	8,160	8,553	16,713	7,141	8,803	15,944	279	541	820	0	1	1	15,580	17,898	33,478
Total	80,450	72,183	152,633	68,362	73,017	141,379	752	1,488	2,240	0	1	1	149,564	146,689	296,253

Test results by age group (Male)





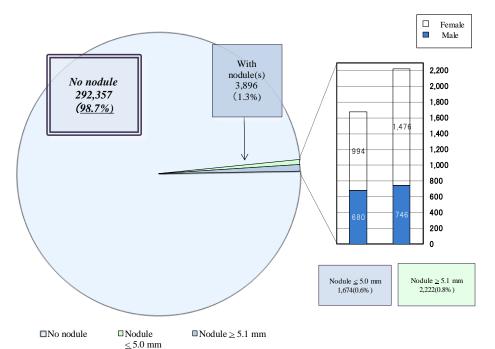
Percentages have been rounded and may not total to 100%.

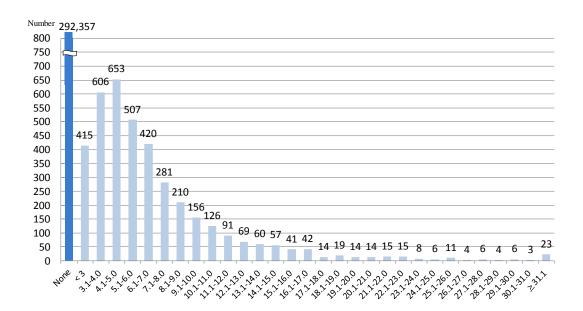
Ages are at the time of the disaster.

## 2. Nodule size

As of 31 October 2014

Nodule size	Total			Test result	Proportion	
Nodule size	Total	Male	Female	Test lesuit	Flopottion	
None	292,357	148,138	144,219	A1	98.7%	
<u>&lt;</u> 3.0 mm	415	187	228	A2	0.6%	
3.1-5.0 mm	1,259	493	766	A2	0.6%	
5.1-10.0 mm	1,574	561	1,013			
10.1-15.0 mm	403	113	290			
15.1-20.0 mm	130	39	91	В	0.8%	
20.1-25.0 mm	58	17	41			
<u>&gt;</u> 25.1 mm	57	16	41			
Total	296,253	149,564	146,689			

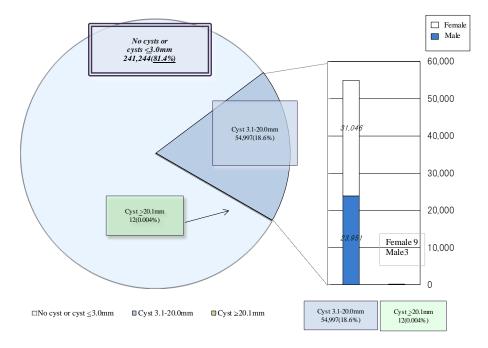


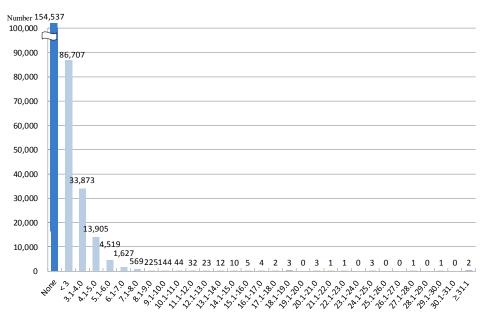


## 3. Cyst size

As of 31 October 2014

Cystaiza	Total			Class	%
Cyst size	Total	Male	Female	Class	70
None	154,537	81,182	73,355	A1	81.4%
<u>&lt;</u> 3.0 mm	86,707	44,428	42,279		01.4%
3.1-5.0 mm	47,778	21,396	26,382		
5.1-10.0 mm	7,084	2,513	4,571	A2	19.00
10.1-15.0 mm	121	41	80		18.6%
15.1-20.0 mm	14	1	13		
20.1-25.0 mm	8	1	7	В	0.00.40/
<u>≥</u> 25.1 mm	4	2	2	d	0.004%
Total	296,253	149,564	146,689		





## Appendix 6

Confirmatory test r	esults by mur										As of 31 O	ctober 2014
	Number of	Number who	Number of	f children who	underwent co	onfirmatory tes	st by age	,	Number	r of confirmed		
	children screened	required confirmatory test	Total	Ages 0-5	Ages 6-10	Ages 11-15	Ages 16-18	Total	Next screer	ing advised	Follow-uj	p advised Aspiration biopsy
	а	b	с	d	e	f	g	h	Al i	A2 j	k	1
		Proportion (%)	Proportion (%)	Proportion (%)	Proportion (%)	Proportion (%)	Proportion (%)	Proportion (%)	Proportion (%)	Proportion (%)	Proportion (%)	Proportion (%)
Target municipalities for	Confirmatory tes	t in FY 2011										
Kawamata	2,221	8	8	0	1	3	4	7	1	0	6	5
	, 	0.4 26	100.0 23	0.0	12.5	37.5 7	50.0	87.5 23	14.3	0.0	85.7 18	83.3
Namie	3,249	0.8	88.5	4.3	13.0	30.4	52.2	100.0	4.3	4	78.3	66.7
Tit-t-	943	6	6	0	2	1	3	6	0	3	3	3
litate	943	0.6	100.0	0.0	33.3	16.7	50.0	100.0	0.0	50.0	50.0	100.0
Minami-soma	10,789	52	48	6	5	16	21	48	4	11	33	19
	.,	0.5	92.3	12.5	10.4	33.3	43.8	100.0	8.3	22.9	68.8	57.6
Date	10,605	50 0.5	45 90.0	0.0	3 6.7	16 35.6	26 57.8	45 100.0	4 8.9	8 17.8	33 73.3	23 69.7
		32	26	1	3	12	10	26	0.9	5	21	14
Tamura	6,325	0.5	81.3	3.8	11.5	46.2	38.5	100.0	0.0	19.2	80.8	66.7
Hirono	838	5	4	0	1	1	2	4	1	2	1	0
Throno	050	0.6	80.0	0.0	25.0	25.0	50.0	100.0	25.0	50.0	25.0	0.0
Naraha	1,153	7	6	1	0	1	4	6	0	2	4	2
		0.6	85.7	16.7	0.0	16.7 5	66.7 6	100.0	0.0	33.3	66.7 10	50.0
Tomioka	2,302	0.6	92.3	0.0	8.3	41.7	50.0	100.0	0.0	16.7	83.3	70.0
Kawauchi	290	4	4	0	1	0	3	4	0	1	3	2
Kawaucm	280	1.4	100.0	0.0	25.0	0.0	75.0	100.0	0.0	25.0	75.0	66.7
Okuma	1,973	14	13	1	1	6	5	13	1	5	7	2
	, · · ·	0.7	92.9	7.7	7.7	46.2	38.5	100.0	7.7	38.5	53.8	28.6
Futaba	949	3 0.3	2 66.7	0.0	0.0	1 50.0	1 50.0	2 100.0	0.0	0.0	2 100.0	2 100.0
		1	1	0.0	0.0	0	0	100.0	0.0	1	0	0
Katsurao	183	0.5	100.0	0.0	100.0	0.0	0.0	100.0	0.0	100.0	0.0	0.0
Subtotal	41,810	221	198	10	22	69	97	197	12	44	141	91
		0.5	89.6	5.1	11.1	34.8	49.0	99.5	6.1	22.3	71.6	64.5
Target municipalities for	Confirmatory tes		271	<i>(</i>	20	106	131	264	12	68	184	93
Fukushima	47,309	283 0.6	95.8	6 2.2	28 10.3	39.1	48.3	264 97.4	4.5	25.8	184 69.7	93 50.5
N71		57	54	0	5	27	40.5	52	2	25.0	43	24
Nihonmatsu	8,857	0.6	94.7	0.0	9.3	50.0	40.7	96.3	3.8	13.5	82.7	55.8
Motomiya	5,234	29	29	1	4	14	10	28	0	9	19	7
intotoniiju	0,201	0.6	100.0	3.4	13.8	48.3	34.5	96.6	0.0	32.1	67.9	36.8
Otama	1,373	7	7	0	0	57.1	3	7	0	14.2	6	4
		0.5	100.0 413	0.0	0.0	57.1 172	42.9 156	100.0 399	0.0	14.3	85.7 248	66.7 99
Koriyama	54,063	0.8	90.2	4.8	15.7	41.6	37.8	96.6	6.0	31.8	62.2	39.9
Kori	1 074	14	13	1	2	3	7	13	0	2	11	3
NOFI	1,874	0.7	92.9	7.7	15.4	23.1	53.8	100.0	0.0	15.4	84.6	27.3
Kunimi	1,437	15	13	2	2	2	7	13	1	2	10	4
		1.0	86.7	15.4	15.4	15.4	53.8	100.0	7.7	15.4	76.9	40.0
Tenei	878	0.8	6 85.7	1 16.7	2 33.3	1 16.7	2 33.3	6 100.0	1 16.7	2 33.3	3 50.0	0.0
		61	59	2	10	27	20	58	6	13	39	15
Shirakawa	10,811	0.6	96.7	3.4	16.9	45.8	33.9	98.3	10.3	22.4	67.2	38.5
Nishigo	3,618	30	26	2	6	9	9	26	2	8	16	5
TATSHIBO	5,018	0.8	86.7	7.7	23.1	34.6	34.6	100.0	7.7	30.8	61.5	31.3
Izumizaki	1,157	5	5	0	2	0	3	5	1	2	2	1
		0.4	100.0	0.0	40.0	0.0	60.0	100.0	20.0	40.0	40.0	50.0
Miharu	2,730	22	21 95.5	0.0	4.8	11 52.4	9 42.9	21 100.0	4 19.0	4 19.0	13 61.9	6 46.2
	L	988	93.3	35	4.8	32.4	42.9	892	53	245	594	261
Subtotal	139,341	0.7	92.8	3.8	13.8	41.0	41.3	97.3	5.9	27.5	66.6	43.9

h) Excluding participants who have not receive the test results.

		Number who	Number o	f children who	underwent co	onfirmatory tes	st by age	[	Number	of confirmed		October 2014
	Number of children screened	required confirmatory	Total	Ages 0-5	Ages 6-10	Ages 11-15	Ages 16-18	Total	Next screen	ing advised	Follow-uj	advised Aspiration
	a	test b	с	d	e	f	g	h	Al	A2	k	biopsy 1
		Proportion (%)	Proportion	Proportion	Proportion	Proportion	Proportion	Proportion (%)	i Proportion	j Proportion	Proportion	Proportion
Target municipalities f	or Confirmatory	· · ·	(%) 3	(%)	(%)	(%)	(%)	1 lopoluon (70)	(%)	(%)	(%)	(%)
Iwaki*	47,918	429 0.9	394 91.8	21 5.3	59 15.0	193 49.0	121 30.7	380 96.4	20 5.3	121 31.8	239 62.9	83 34.7
Sukagawa	11,591	101 0.9	96 95.0	6 6.3	16 16.7	52 54.2	22 22.9	95 99.0	7 7.4	32 33.7	56 58.9	12 21.4
Soma	5,085	46 0.9	42 91.3	3	9 21.4	19 45.2	11 26.2	41 97.6	3 7.3	16 39.0	22 53.7	6 27.3
Kagamiishi	1,952	9	88.9	0	4 50.0	37.5	1 12.5	8 100.0	0	1 12.5	7 87.5	14.3
Shinchi	1,110	7	7	0.0	3 3 42.9	3	1	6 85.7	0.0	0.0	6 100.0	3
Nakajima	801	0.6	2	0	0	42.9	14.3	2	0	0	2	1
Yabuki	2,462	0.2	100.0	0.0	0.0	50.0	50.0	100.0	0.0	0.0	100.0	50.0
Ishikawa	2,086	0.7	76.5 10	0.0	15.4 4	46.2	38.5	92.3 10	0.0	25.0 1	75.0 9	11.1 5
Yamatsuri	776	0.5	90.9 2	0.0	40.0 0	40.0	20.0	100.0	0.0	10.0 0	90.0 2	55.6 0
Asakawa	1,070	0.4	66.7 10	0.0	0.0	50.0	50.0 3	100.0	0.0	0.0	100.0 8	0.0
Hirata		1.1	83.3	10.0	10.0 4	50.0 3	30.0	100.0	0.0	20.0	80.0	25.0
	829	1.1 22	100.0 22	0.0	44.4	33.3 9	22.2	88.9 19	12.5	12.5 2	75.0 15	16.7 5
Tanagura	2,259	1.0	100.0	9.1 0	22.7	40.9	27.3	86.4	10.5	10.5	78.9 3	33.3 0
Hanawa	1,218	0.7	87.5	0.0	14.3 0	42.9 0	42.9	57.1	0.0	25.0 0	75.0	0.0
Samegawa	507	0.6	33.3 13	0.0	0.0	0.0	100.0	100.0	0.0	0.0	100.0	0.0
Ono	1,327	1.1	92.9	7.7	15.4	46.2	30.8	100.0	7.7	30.8	61.5	0.0
Tamakawa	986	10 1.0	8 80.0	1 12.5	2 25.0	2 25.0	3 37.5	8 100.0	0.0	2 25.0	6 75.0	1 16.7
Furudono	792	6 0.8	6 100.0	0.0	1 16.7	4 66.7	1 16.7	6 100.0	0 0.0	2 33.3	4 66.7	1 25.0
Hinoemata	61	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0 0.0	0.0	0.0	0.0
Minami-aizu	1,809	16 0.9	15 93.8	0 0.0	7 46.7	7 46.7	1 6.7	13 86.7	1 7.7	3 23.1	9 69.2	2 22.2
Kaneyama	137	0.0	0.0	0.0	0 0.0	0 0.0	0 0.0	0.0	0.0	0	0.0	0.0
Showa	101	0	0.0	0	0.0	0	0	0.0	0 0.0	0	0	0.0
Mishima	129	1	1 100.0	0.0	1 100.0	0	0	1 100.0	0 0.0	0.0	1 100.0	0.0
Shimogo	691	10 1.4	9	0.0	1	5	3	88.9	0	3 37.5	5	2 40.0
Kitakata	5,727	46	40 87.0	1 2.5	11 11 27.5	17 42.5	11 27.5	40	2	11 27.5	27 67.5	40.0
Nishiaizu	638	5	4	0	2	1	1	2	0	0	2	0
Tadami	494	0.8	80.0	0.0	50.0	25.0	25.0	50.0	0.0	0.0	100.0	0.0
Inawashiro	1,881	1.4	85.7	0.0	50.0	50.0	0.0	100.0	0.0	33.3	66.7 7	25.0
Bandai	414	0.7	92.3	8.3	8.3	58.3	25.0	100.0	16.7	25.0	58.3	14.3
Kitashiobara	385	1.0	75.0 1	33.3	0.0	<u>33.3</u> 0	33.3 0	100.0	33.3 0	0.0	66.7 0	0.0
Aizumisato	2,551	0.3	100.0 23	100.0	0.0	0.0	0.0	100.0	0.0	100.0	0.0	0.0
		1.0 25	88.5 23	0.0	17.4 4	52.2 9	30.4 7	91.3 23	9.5 0	42.9 4	47.6 19	30.0 4
Aizubange	2,080	1.2	92.0 2	13.0 0	17.4 0	39.1 2	30.4 0	100.0	0.0	17.4 1	82.6 1	21.1
Yanaizu	375	0.5	100.0 140	0.0	0.0	100.0 76	0.0	100.0	0.0	50.0 43	50.0 81	0.0
Aizuwakamatsu	14,685	1.1	87.5	4.3	22.1 1	54.3 3	19.3 3	94.3	6.1 1	32.6 0	61.4	24.7
Yugawa	508	1.4	100.0	0.0	14.3	42.9	42.9	100.0	14.3	0.0	85.7	16.7
Subtotal	115,435	1,032 0.9	936 90.7	48 5.1	179 19.1	457 48.8	252 26.9	<u>896</u> 95.7	51 5.7	268 29.9	577 64.4	167 28.9
Total	296,586	2,241 0.8	2,051 91.5	93 4.5	328 16.0	902 44.0	728 35.5	1,985 96.8	116 5.8	557 28.1	1,312 66.1	519 39.6

\*Including districts of FY 2012

## Thyroid Ultrasound Examination (Full-scale Thyroid Screening Program) Reported on 25 December 2014 Revised on 2 February 2015

## 1. Summary

## 1.1 Purpose

In order to protect the long-term health of children, we are now engaged in a Full-scale Thyroid Screening Program following a preliminary Initial Screening period.

#### 1.2 Group

Residents of Fukushima Prefecture including visitors who were born between 2 April 1992 and 1 April 2011 (Initial Screening), and those who were born between 2 April 2011 and 1 April 2012.

### 1.3 Implementation Period

The full-scale screening starts from 2 April 2014 and lasts for two years.

We repeat the examination every two years until the age of 20, and every five years afterwards.

### 1.4 Responsible Organizations

Fukushima Prefecture commissioned Fukushima Medical University to conduct the survey in cooperation with institutions inside and outside Fukushima.

We provide the Primary Examination at ten medical institutions under contract, and try to have more institutions inside Fukushima Prefecture.

Ninety-two institutions outside Fukushima have agreed to cooperate as of 31 October 2014.

The confirmatory examination has been conducted in Koriyama and Iwaki in Fukushima Prefecture from July 2013, Aizuwakamatsu from August 2014, and several institutions outside Fukushima Prefecture from November 2013. There are 25 institutions that provide the examination as of 31 October 2014.

#### 1.5 Method

1.5-1 Primary Examination

We used ultrasonography for examination of the thyroid gland.

Assessments were made by specialists on the basis of the following criteria.

-Diagnostic Criteria: A

Those with A1 and A2 test results were advised to take the next examination starting from April 2014.

(A1) No nodules / cysts

(A2) Nodules  $\leq$  5.0mm or cysts  $\leq$  20.0mm

-Diagnostic Criteria: B

Those with B test result are advised to take the Confirmatory Examination.

(B) Nodules  $\geq$  5.1mm or cysts  $\geq$  20.1mm

Some A2 test results may be classified as B results when clinically indicated.

-Diagnostic Criteria: C

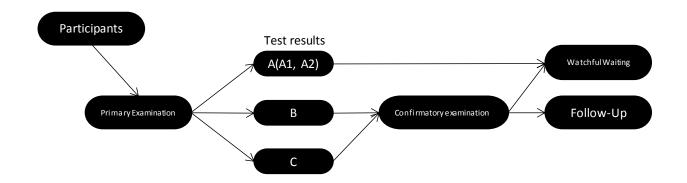
Those with C test result are advised to take the Confirmatory Examination.

(C) Immediate need for confirmatory examination.

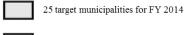
### 1.5-2 Confirmatory Examination

We conduct fine-needle aspiration cytology (FNAC), blood test, and urine test for those with B or C test results.

### 1.5-3 Flow chart



### 1.6 Target Municipalities



34 target municipalities for FY 2015



### 2. Results (As of 31 October 2014)

#### 2.1-1 Primary Examination

The Primary Examination started from 2 April 2014, and the participation rate as of 31 October 2014 is 37.9% (82,101) out of around 220,000 from 25 municipalities (Appendix 1 and 2).

The results have been returned to 73.7% (60,505) of the participants (Appendix 3).

Those with A1 or A2 test results were 60,048 (99.2%), B were 457 (0.8%), and C were 0.

Table 1. Selecting	able 1. Screening lest coverage as of 51 October 2014									
	Participants		ts							
	Population	opulation	Screened			Class				
		Proportion (%)	outside	Proportion (%)	Α		Requiring confirmatory test			
	a	b (b/a)	Fukushima c (c/b)	c (c/b)	A1 d (d/c)	A2 e (e/c)	B f (f/c)	C g (g/c)		
FY 2014	216,189	81,621 (37.8)	5,057	60,110 ( 73.6)	25,418 (42.3)	34,237 (57.0)	455 (0.8)	0 (0.0)		
FY 2015	480	480 (100.0)	4	395 ( 82.3)	145 (36.7)	248 (62.8)	2 (0.5)	0 (0.0)		
Total	216,669	82,101 (37.9)	5,061	60,505 (73.7)	25,563 (42.2)	34,485 (57.0)	457 (0.8)	0 (0.0)		

Table 1. Screening test coverage as of 31 October 2014

Table 2. Number and proportion of children with nodules/cysts as of 31 October 2014

	Number of confirmed	Number a	Number and proportions of children with nodules/cysts						
	screening results	Noc	lules	Су	vsts				
	a	<u>&gt;</u> 5.1mm b (b/a)	<u>&lt;</u> 5.0mm c (c/a)	<u>&gt;</u> 20.1mm d (d/a)	<u>&lt;</u> 20.0mm e (e/a)				
FY 2014	a 60,110	. ,	358 (0.6)	1 (0.0)	34,388 (57.2)				
FY 2015	395	2 (0.5)	2 (0.5)	0 (0.0)	247 (62.5)				
Total	60,505	455 (0.8)	360 (0.6)	1 (0.0)	34,635 (57.2)				

Fractions have been rounded and may not total to 100%.

#### 2.1-2 Comparison with the Initial Screening

Among 60,048 participants who were diagnosed as A1 or A2, 56,204 (93.6%) had A1 or A2 results from the Initial Screening. Among 457 participants who were diagnosed as B, 333 (72.9%) had A1 or A2 results from the Initial Screening.

Table 5. Cl	nang	es in me result	s of Initial Screening a	ind Full-scale	Thyrold Scree	ening Program	1 as 01 51 Ocu	Def 2014
			Number of		Results of	of the Initial S	creening	
			confirmed test results of Full-scale	I	A			Non-
			Thyroid Screening	A1	A2	В	С	participants
		Program (%) a	b b/a (%)	c c/a (%)	d d/a (%)	e e/a (%)	f f/a (%)	
		A1	25,563	21,142	1,899	19	0	2,503
	А	AI	(100.0)	(82.7)	(7.4)	(0.1)	(0.0)	(9.8)
Results of		A2	34,485	12,840	20,323	65	0	1,257
the Full-		A2	(100.0)	(37.2)	(58.9)	( 0.2)	( 0.0)	(3.6)
scale		В	457	127	206	108	0	16
Thyroid		В	(100.0)	(27.8)	(45.1)	(23.6)	( 0.0)	(3.5)
Screening		С	0	0	0	0	0	0
Screening	Screening	C	(0.0)	( 0.0)	( 0.0)	( 0.0)	( 0.0)	( 0.0)
		Total	60,505	34,109	22,428	192	0	3,776
		Total	(100.0)	(56.4)	(37.1)	(0.3)	(0.0)	(6.2)

Table 3. Changes in the results of Initial Screening and Full-scale Thyroid Screening Program as of 31 October 2014

### 2.1-3 Confirmatory Examination

The number of children who required further testing (started in June 2014) is 457, of whom 248 (54.3%) underwent the confirmatory testing. Among them, 155 (62.5%) have completed the tests (Appendix 4).

Of 155 participants with B test results from the Primary Examination, 62 (40.0%) with confirmed test results of Confirmatory Examination have been confirmed within the range of A1 and A2, and were advised to take their next regularly scheduled examination.

Those who require 6-12-month follow-up provided by health insurance were 93 (60.0%).

	Number of children	Participants Confirmed test results					
	requiring confirmatory	Proportion (%)	Confirmatory test coverage (%)	Next screening advised		Follow-up advised	
	test a	b (b/a)		A1 d (d/c)	A2 e (e/c)	f (f/c)	Cytology g (g/f)
FY 2014	455	246 (54.1)	155 ( 63.0)	9 ( 5.8)	53 (34.2)	93 (60.0)	11 ( 11.8)
FY 2015	2	2 (100.0)	0 ( 0.0)	0 ( 0.0)	0 (0.0)	0 (0.0)	0 ( 0.0)
Total	457	248 (54.3)	155 ( 62.5)	9 ( 5.8)	53 (34.2)	93 (60.0)	11 ( 11.8)

Table 4. Confirmatory testing coverage and results as of 31 October 2014

Priority was given to those in urgent clinical need.

Those confirmed within the range of A1 and A2 (including those with other thyroid conditions) were advised to take their next regularly scheduled examination.

Those who require 6- or 12-month follow-up provided by health insurance and those beyond the specified level of A2 were categorized as "Follow-up advised".

### 2.2 Fine Needle Aspiration Biopsy and Cytology (FNAC)

2.2-1 Aspiration biopsy cytology results

Table 5. Target municipalities in FY 2014

Suspicious or malignant	4 (0 surgical case)
Male to female ratio	3:1
Mean age (SD, min-max)	15.5 (4.8, 10-20)
	12.0 (5.0, 6-17) at the time of the disaster
Mean tumor size	12.0 mm (4.4 mm, 7.0-17.3 mm)

2.2-2 Suspicious or malignant cases on FNAC by age and sex

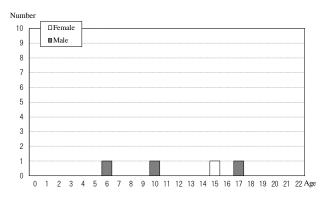


Fig.3 Age as of 11 March 2011

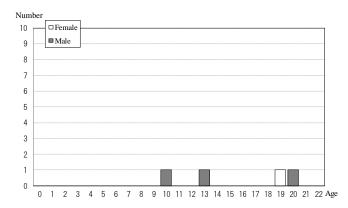


Fig. 4 Age as the date of confirmatory examination

2.2-3 Suspicious or malignant cases on FNAC by estimated radiation dose

Three of the 4 cases (75.0%) participated in the Basic Survey (radiation dose estimates) and have received the results. Among those, 1 had estimated radiation exposure dose below 1 mSv, and the highest effective dose was 2.1 mSv.

Table 6. Number of	suspicious or n	nalignant cases	s by age and s	ex	As of 31 O	ctober 2014
Effective dose	Sex		Age at	the time of di	isaster	
(mSv)	Bex	0-5	6-10	11-15	16-18	Total
<0.5	Male	0	0	0	0	0
<0.5	Female	0	0	0	0	0
0510	Male	0	1	0	0	1
0.5-1.0	Female	0	0	0	0	0
10.15	Male	0	0	0	1	1
1.0-1.5	Female	0	0	0	0	0
15.20	Male	0	0	0	0	0
1.5-2.0	Female	0	0	0	0	0
20.25	Male	0	1	0	0	1
2.0-2.5	Female	0	0	0	0	0
T- (-1	Male	0	2	0	1	3
Total	Female	0	0	0	0	0

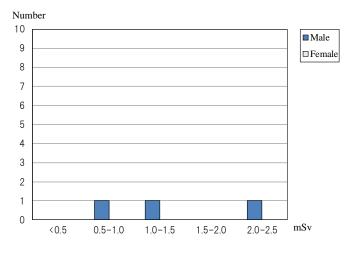


Fig. 5 Effective dose of the respondents

#### 2.2-4 Blood and urinary iodine test results as of 31 October 2014

	FT4 1) (ng/dL)	FT3 2) (pg/mL)	TSH 3) (μIU/mL)	Tg 4) (ng/mL)	TgAb 5) (IU/mL)	TPOAb 6) (IU/mL)
Reference Range	0.95-1.74	2.13-4.07 7)	0.340-3.880	<u>&lt;</u> 32.7	<28.0	<16.0
4 suspicious or malignant	1.3 <u>+</u> 0.1 (0.0%)	$3.8 \pm 0.6 (0.0\%)$	2.4 <u>+</u> 1.2 (0.0%)	62.2 <u>+</u> 64.6 (50.0%)	- (0.0%)	- (25.0%)
Other 150	1.2 <u>+</u> 0.1 (6.7%)	3.7 <u>+</u> 0.5 (4.7%)	1.5 <u>+</u> 1.0 (9.3%)	20.3 <u>+</u> 41.4 (9.3%)	- (12.7%)	- (10.0%)

Table 7. Blood test results Mean±SD (Abnormality ratio)

Table 8. Urinary iodine (µg/day)

	Minimum	25th percentile	Median	75th percentile	Maximum	
4 suspicious or malignant	61	76.5	139.5	556.5	690	
Other 150	38	119	178	372	3,550	

1) FT4: Free Thyroxine; higher among patients with Graves' disease and lower with Hashimoto's disease.

2) FT3: Free Triiodothyronine; higher among patients with Graves' disease and lower with Hashimoto's disease.

3) TSH: Thyroid Stimulating Hormone; higher among patients with Hashimoto's disease and lower with Graves' disease.

4) Tg: Thyroglobulin; higher when thyroid tissue is destroyed or when thyroid cancer produces thyroglobulin.

5) TgAb: Anti-Thyroglobulin Antibody; higher among patients with Hashimoto's disease and Graves' disease.

6) TPOAb: Anti-Thyroid Peroxidase Antibody; higher among patients with Hashimoto's disease or Graves' disease.

7) Reference range differs according to age.

2.2-5 Confirmatory test results by municipality as of 31 October 2014

The proportion of suspicious or malignant is 0.00% in FY 2014 target municipalities (13 municipalities in the nationally designated evacuation zones and 12 towns of the Kempoku area), 0.00% in FY 2015 target municipalities (34 towns of the Iwaki, Kennan, and Aizu areas).

Confirmatory te	st results in F	Y 2014				ı
	Number of children screened	Number who required confirmatory test	Proportion who required confirmatory test (%)	Number who underwent confirmatory test	Suspicious or malignant cases	Proportion of suspicious or malignant cases (%)
Kawamata	1,664	19	1.1	14	0	0.00
Namie	1,829	17	0.9	10	0	0.00
Iitate	682	10	1.5	6	0	0.00
Minami-soma	7,375	55	0.7	37	0	0.00
Date	8,592	65	0.8	50	1	0.01
Tamura	4,031	33	0.8	21	1	0.02
Hirono	485	7	1.4	6	0	0.00
Naraha	703	4	0.6	3	0	0.00
Tomioka	1,184	13	1.1	8	0	0.00
Kawauchi	146	0	0.0	0	0	0.00
Okuma	1,224	6	0.5	5	1	0.08
Futaba	433	2	0.5	0	0	0.00
Katsurao	90	1	1.1	1	0	0.00
Fukushima	39,568	214	0.5	81	1	0.00
Nihonmatsu	7,196	5	0.1	2	0	0.00
Motomiya	4,028	0	0.0	0	0	0.00
Otama	1,131	0	0.0	0	0	0.00
Koriyama	509	0	0.0	0	0	0.00
Kori	332	0	0.0	0	0	0.00
Kunimi	274	1	0.4	0	0	0.00
Tenei	7	0	0.0	0	0	0.00
Shirakawa	24	0	0.0	0	0	0.00
Nishigo	11	0	0.0	0	0	0.00
Izumizaki	1	0	0.0	0	0	0.00
Miharu	102	3	2.9	2	0	0.00
Subtotal	81,621	455	0.6	246	4	0.00
Confirmatory te	st results in F	FY 2015				
Subtotal	480	2	0.4	2	0	0.00
Total	82,101	457	0.6	248	4	0.00
10101	02,101	JI	0.0	2-70	+	0.00

Table 9. Confirmatory test results in FY 2014

FY 2014 is from 1 April 2014 through 31 March 2015.

FY 2015 is from 1 April 2015 through 31 March 2016.

### Appendix 1

	Target Population	Partici		Proportion (%)	Number and	proportion of	participants by a	age group	Participants living outside	Proportio (%)
			Screened outside Fukushima	-					Fukushima	()-)
	а	b	3)	b/a	2-7	8-12	13-17	18-22	с	c/b
reening coverage	by municipalit	y in FY 2014								
Kawamata	2,461	1,664	33	67.6	392	569	582	121 1	44	2
					23.6 489	34.2 539	35.0 567	7.3 2 234	)	
Namie	3,771	1,829	522	48.5	26.7	29.5	31.0	12.8	582	31
				<i>(0.7</i>	163	257	227	35		
Iitate	1,123	682	26	60.7	23.9	37.7	33.3	5.1	29	4
Minami-soma	12,981	7,375	1,390	56.8	1,902	2,578	2,276	619	1657	22
	12,001	1,515	1,070	2010	25.8	35.0	30.9	8.4		
Date	11,737	8,592	247	73.2	2,132	2,706	2,918	836	233	2
					24.8	31.5 1,582	34.0 1,188	9.7		
Tamura	7,321	4,031	109	55.1 -	25.2	39.2	29.5	246 6.1	102	2
					139	156	135	55		
Hirono	1,108	485	87	43.8	28.7	32.2	27.8	11.3	83	17
Naraha	1,488	703	107	47.2	196	215	213	79	114	16
Inarana	1,400	703	107	47.2	27.9	30.6	30.3	11.2	114	10
Tomioka	3,101	1,184	310	38.2	330	330	347	177	350	29
	- , -	, -			27.9	27.9	29.3	14.9		
Kawauchi	360	146	14	40.6	41	57	37	11	16	11
					28.1	39.0 386	25.3 313	7.5 114		
Okuma	2,498	1,224	304	49.0	33.6	31.5	25.6	9.3	332	27
					149	139	101	44		
Futaba	1,258	433	187	34.4	34.4	32.1	23.3	10.2	200	46
Katsurao	240	90	13	37.5 -	25	34	23	8	12	13
Katsurao	240	,0	15	51.5	27.8	37.8	25.6	8.9	12	1.
Fukushima	55,732	39,568	1,586	71.0	9,694	12,306	12,921	4,647	2,020	5
					24.5	31.1	32.7	11.7		
Nihonmatsu	10,595	7,196	74	67.9	1,714 23.8	2,378 33.0	2,559 35.6	545 7.6	93	1
					1,074	1,421	1,239	294		
Motomiya	6,342	4,028	36	63.5	26.7	35.3	30.8	7.3	52	1
Otama	1 694	1 1 2 1	3	(7.2)	325	391	326	89	4	(
Otallia	1,684	1,131	3	67.2 -	28.7	34.6	28.8	7.9	4	0
Koriyama	66,204	509	4	0.8	71	105	275	58	4	(
	, .				13.9	20.6	54.0	11.4		
Kori	2,136	332	3	15.5	12	21	269	30	3	(
					3.6	6.3 22	81.0 219	9.0 28		
Kunimi	1,624	274	0	16.9	1.8	8.0	79.9	10.2	0	(
The l	1.101	_	-		1	3	1	2		
Tenei	1,101	7	0	0.6	14.3	42.9	14.3	28.6	0	(
Shirakawa	12,671	24	0	0.2	8	4	10	2	0	(
Shirukuwu	12,071	24	0	0.2	33.3	16.7	41.7	8.3		
Nishigo	4,161	11	1	0.3	0	3	6	2	1	ç
					0.0	27.3	54.5 0	18.2 0		
Izumizaki	1,337	1	0	0.1	0.0	100.0	0.0	0.0	1	100
					9	28	61	4		
Miharu	3,155	102	1	3.2 -	8.8	27.5	59.8	3.9	1	1
Subtatel	216 100	81,621	E 0.57	27.0	20,297	26,231	26,813	8,280	5.022	
Subtotal	216,189	81,021	5,057	37.8	24.9	32.1	32.9	10.1	5,933	7
reening coverage	by municipalit	win EV 2015								
reening coverage	by municipalit	уш г ¥ 2015			71	141	237	31		
Subtotal	480	480	4	100.0	/ 1	1+1	231	31	15	1

8,311

10.1

5,948

7.2

26,372

32.1

20,368

24.8

37.9

27,050

32.9

Thyroid	Illtracound	Evamination	(TIF)	coverage	by municipality

1) Number of participants. 2) Number of participants in the age group/Number of participants.

82,101

3) Number of participants who underwent the test outside Fukushima.

216,669

Total

Fractions have been rounded and may not total to100%. Ages are at the time when the participants underwent the testing.

5,061

### Appendix 2 Thyroid Ultrasound Examination (TUE) coverage by prefecture

Prefecture	Number of test venues	Participants	Prefecture	Number of test venues	Participants	Prefecture	Number of test venues	Participants
Hokkaido	4	92	Fukui	1	8	Hiroshima	1	4
Aomori	1	58	Yamanashi	1	76	Yamaguchi	1	8
Iwate	3	105	Nagano	2	29	Tokushima	1	4
Miyagi	2	1,215	Gifu	1	13	Kagawa	1	7
Akita	1	89	Shizuoka	2	61	Ehime	1	1
Yamagata	3	431	Aichi	3	59	Kōchi	1	3
Ibaraki	4	315	Mie	1	11	Fukuoka	2	28
Tochigi	5	325	Shiga	1	2	Saga	1	10
Gunma	1	90	Kyōto	3	20	Nagasaki	2	10
Saitama	1	154	Ōsaka	6	50	Kumamoto	1	2
Chiba	3	212	Hyōgo	1	38	Ōita	1	17
Tōkyō	12	579	Nara	1	9	Miyazaki	1	15
Kanagawa	4	356	Wakayama	1	2	Kagoshima	1	12
Niigata	1	467	Tottori	1	7	Okinawa	1	11
Toyama	1	5	Shimane	1	3			
Ishikawa	1	29	Okayama	3	19	Total	92	5,061

As of 31 October 2014

Participants underwent testing at venues outside Fukushima carried out either by Fukushima Medical University staff (once in Niigata, Kanagawa, and Yamagata respectively) or by local specialists.

### Appendix 3

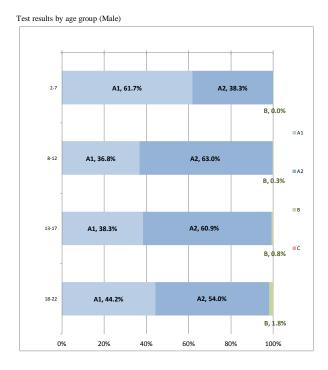
lts of primary examin	ation by municip	ality							As of 31 Oc	tober 2014
		Number		Number by te	st results		NT T	ulao	-	
	Participants	confirmed b		Proportio	n (%)		Nod	ules	Cys	sts
			A		T		Proport	ion (%)	Proporti	on (%)
		Proportion (%)	A1	A2	В	С	<u>≥</u> 5.1mm	<u>&lt;</u> 5.0mm	≥20.1mm	<u>&lt;</u> 20.0m
ening coverage by 1	a municipality in	b/a (%) FY 2014	l		1			_	1	
			695	021	19	0	19	11	1	8
Kawamata	1,664	1,535 92.2	685 44.6	831 54.1	1.2	0.0	18 1.2	11 0.7	0.1	0 54
		1,570	662	891	1.2	0.0	1.2	9	0.1	8
Namie	1,829	85.8	42.2	56.8	1.1	0.0	1.1	0.6	0.0	5
		625	297	318	1.1	0.0	1.1	2	0.0	3
Iitate	682	91.6	47.5	50.9	1.6	0.0	1.6	0.3	0.0	5
		7,200	3,089	4,056	55	0.0	55	49	0.0	4,0
Minami-soma	7,375	97.6	42.9	56.3	0.8	0.0	0.8	0.7	0.0	-,0
		7,923	3,424	4,434	65	0.0	65	55	0.0	4,4
Date	8,592	92.2	43.2	56.0	0.8	0.0	0.8	0.7	0.0	5
		4,007	1,646	2,328	33	0.0	33	22	0.0	2,3
Tamura	4,031	99.4	41.1	58.1	0.8	0.0	0.8	0.5	0.0	-,:
		478	209	262	7	0	7	5	0.0	2
Hirono	485	98.6	43.7	54.8	1.5	0.0	1.5	1.0	0.0	5
		687	290	393	4	0.0	4	6	0.0	
Naraha	703	97.7	42.2	57.2	0.6	0.0	0.6	0.9	0.0	5
		1,120	486	621	13	0.0	13	9	0.0	6
Tomioka	1,184	94.6	43.4	55.4	1.2	0.0	1.2	0.8	0.0	5
		145	44	101	0	0.0	0	1	0.0	
Kawauchi	146	99.3	30.3	69.7	0.0	0.0	0.0	0.7	0.0	6
		1,196	520	670	6	0.0	6	11	0.0	6
Okuma	1,224	97.7	43.5	56.0	0.5	0.0	0.5	0.9	0.0	5
		407	185	220	2	0.0	2	3	0.0	2
Futaba	433	94.0	45.5	54.1	0.5	0.0	0.5	0.7	0.0	5
		88	49	38	1	0.0	1	0.7	0.0	5
Katsurao	90	97.8	55.7	43.2	1.1	0.0	1.1	0.0	0.0	4
		32,090	13,431	18,445	214	0.0	213	168	0.0	18,5
Fukushima 39,568	39,568	81.1	41.9	57.5	0.7	0.0	0.7	0.5	0.0	5
		320	117	198	5	0	5	3	0	
Nihonmatsu	7,196	4.4	36.6	61.9	1.6	0.0	1.6	0.9	0.0	6
		51	21	30	0	0	0	0	0	
Motomiya	4,028	1.3	41.2	58.8	0.0	0.0	0.0	0.0	0.0	5
		13	5	8	0	0	0	0	0	-
Otama	1,131	1.1	38.5	61.5	0.0	0.0	0.0	0.0	0.0	6
		192	81	111	0	0	0	2	0	
Koriyama	509	37.7	42.2	57.8	0.0	0.0	0.0	1.0	0.0	5
		195	80	115	0	0	0	1	0	
Kori	332	58.7	41.0	59.0	0.0	0.0	0.0	0.5	0.0	5
		144	47	96	1	0	1	1	0	
Kunimi	274	52.6	32.6	66.7	0.7	0.0	0.7	0.7	0.0	6
	1	3	1	2	0	0	0	0	0	5
Tenei	7	42.9	33.3	66.7	0.0	0.0	0.0	0.0	0.0	6
<u></u>		15	10	5	0	0	0	0	0	
Shirakawa	24	62.5	66.7	33.3	0.0	0.0	0.0	0.0	0.0	3
NF 11		5	1	4	0	0	0	0	0	-
Nishigo	11	45.5	20.0	80.0	0.0	0.0	0.0	0.0	0.0	8
Imagin 11		1	0	1	0	0	0	0	0	
Izumizaki	1	100.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	10
	100	100	38	59	3	0	3	0	0	
Miharu	102	98.0	38.0	59.0	3.0	0.0	3.0	0.0	0.0	6
Seleter 1	01 (21	60,110	25,418	34,237	455	0	453	358	1	34,3
Subtotal	81,621	73.6	42.3	57.0	0.8	0.0	0.8	0.6	0.0	5
ening coverage by 1	municipality in			240				_		
Subtotal	480	395	145	248	2	0	2	2	0	
		82.3	36.7	62.8	0.5	0.0	0.5	0.5	0.0	6
1		60.505	25.552	24.405		0	1.7.7	260		34,6
Total	82,101	60,505	25,563	34,485	457	0	455	360	1	

Fractions have been rounded and may not total to 100%.

### Appendix 4

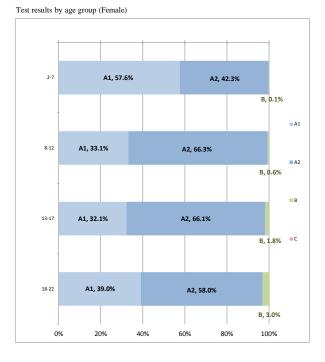
### 1. Thyroid Ultrasound Examination results by age and sex

														As of 31	October 2014
		A1	A	A A2			В		С			Total			
Ages	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
2-7	5,100	4,533	9,633	3,169	3,333	6,502	3	7	10	0	0	0	8,272	7,873	16,145
8-12	4,048	3,446	7,494	6,931	6,913	13,844	31	61	92	0	0	0	11,010	10,420	21,430
13-17	3,518	2,663	6,181	5,595	5,476	11,071	75	146	221	0	0	0	9,188	8,285	17,473
18-22	1,081	1,174	2,255	1,322	1,746	3,068	43	91	134	0	0	0	2,446	3,011	5,457
Total	13,747	11,816	25,563	17,017	17,468	34,485	152	305	457	0	0	0	30,916	29,589	60,505



Percentages have been rounded and may not total to 100%.

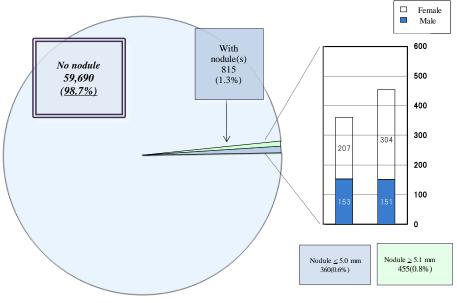
Ages are at the time when the participants underwent the testing.



#### 2. Nodule size

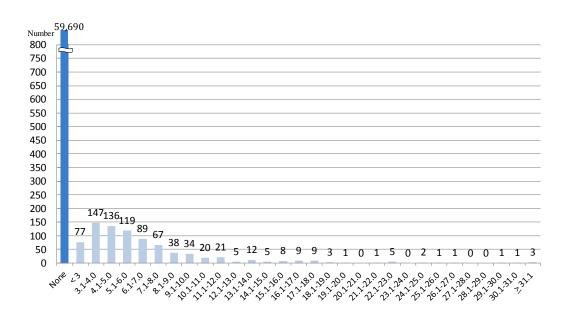
As of 31 October 2014

Nodule size	Total			Test result	Proportion	
Nodule size	Totai	Male	Female	Test lesuit	Поронноп	
None	59,690	30,612	29,078	A1	98.7%	
<u>&lt;</u> 3.0 mm	77	36	41	A2	0.6%	
3.1-5.0 mm	283	117	166	A2	0.0%	
5.1-10.0 mm	347	116	231			
10.1-15.0 mm	63	22	41		0.8%	
15.1-20.0 mm	30	11	19	В		
20.1-25.0 mm	8	2	6			
<u>&gt;</u> 25.1 mm	7	0	7			
Total	60,505	30,916	29,589			



 $\square$  Nodule  $\ge 5.1$  mm

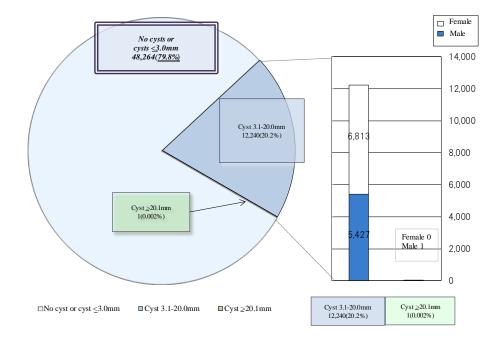


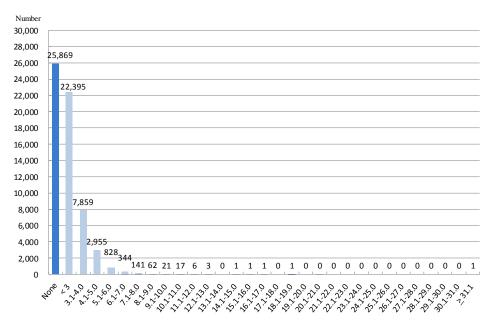


#### 3. Cyst size

As of 31 October 2014

Cust size	Total			Class	0/	
Cyst size	Total	Male	Female	Class	%	
None	25,869	13,855	12,014	A1	79.8%	
<u>&lt;</u> 3.0 mm	22,395	11,633	10,762		79.070	
3.1-5.0 mm	10,814	4,919	5,895			
5.1-10.0 mm	1,396	500	896	A2	20.2%	
10.1-15.0 mm	27	6	21			
15.1-20.0 mm	3	2	1			
20.1-25.0 mm	0	0	0	В	0.002%	
<u>&gt;</u> 25.1 mm	1	1	0	В	0.002%	
Total	60,505	30,916	29,589			





### Appendix 5

	ults by municipal		Number of	of children who	underwent con	firmatory test b	y age		As of 31 October 2014 Number of confirmed results			
	Number of children screened	Number who required confirmatory test	Total	Ages 2-7	Ages 8-12	Ages 13-17	Ages 18-22	Total	Next screen	ing advised	Follow-u	p advised Aspiratio
	a	b	с	d	e	f	g	h	A1 i	A2	k	biopsy cytology 1
		Proportion (%)	Proportion (%)	Proportion (%)	Proportion (%)	Proportion (%)	Proportion (%)	Proportion (%)	Proportion (%)	j Proportion (%)	Proportion (%)	Proportio (%)
reening coverage b	v municipality in	FY 2014										
Kawamata	1,664	19	14	0	3	9	2	12	3	4	5	
	1,001	1.1	73.7	0.0	21.4	64.3 3	14.3 7	85.7	25.0	33.3	41.7	20
Namie	1,829	0.9	58.8	0.0	0.0	30.0	70.0	70.0	0.0	28.6	71.4	(
litate	682	10	6	0	2	3	1	6	1	2	3	
		1.5	60.0 37	0.0	33.3 7	50.0 22	16.7 7	100.0	16.7	33.3 5	50.0 19	33
Minami-soma	7,375	0.7	67.3	2.7	18.9	59.5	18.9	70.3	7.7	19.2	73.1	10
Date	8,592	65	50	1	17	29	3	36	0	19	17	
	,	0.8	76.9 21	2.0	34.0	58.0 15	6.0 3	72.0	0.0	52.8 8	47.2	11
Tamura	4,031	0.8	63.6	4.8	9.5	71.4	14.3	81.0	5.9	47.1	47.1	12
Hirono	485	7	6	0	1	3	2	6	0	3	3	
		1.4	85.7	0.0	16.7 0	50.0 0	33.3	100.0	0.0	50.0 0	50.0 2	(
Naraha	703	0.6	75.0	0.0	0.0	0.0	100.0	66.7	0.0	0.0	100.0	(
Tomioka	1,184	13	8	0	1	2	5	5	0	1	4	
	-,	1.1	61.5 0	0.0	12.5	25.0	62.5 0	62.5	0.0	20.0	80.0	2:
Kawauchi	146	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Okuma	1,224	6	5	0	0	3	2	5	0	1	4	
Okuma	1,224	0.5	83.3	0.0	0.0	60.0	40.0	100.0	0.0	20.0	80.0	50
Futaba	433	2 0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(
Katsurao	90	1	1	0	1	0	0	1	0	1	0	
Kaisurao	90	1.1	100.0	0.0	100.0	0.0	0.0	100.0	0.0	100.0	0.0	(
Fukushima	39,568	214 0.5	81 37.9	2.5	21 25.9	49 60.5	9	32	2 6.3	7 21.9	23 71.9	4
NUL	7.100	5	2	0	0	1	1	0	0.5	0	0	
Nihonmatsu	7,196	0.1	40.0	0.0	0.0	50.0	50.0	0.0	0.0	0.0	0.0	(
Motomiya	4,028	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Otama	1,131	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(
Koriyama	509	0	0	0	0	0	0	0	0	0	0	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(
Kori	332	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(
Kunimi	274	1	0	0	0	0	0	0	0	0	0	
		0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Tenei	7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(
Shirakawa	24	0	0	0	0	0	0	0	0	0	0	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(
Nishigo	11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(
Izumizaki	1	0	0	0	0	0	0	0	0	0	0	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(
Miharu	102	2.9	66.7	0.0	0.0	2 100.0	0.0	0.0	0.0	0.0	0.0	(
Subtotal	81,621	455	246	5	55	141	45	155	9	53	93	1
		0.6	54.1	2.0	22.4	57.3	18.3	63.0	5.8	34.2	60.0	1
reening coverage b		FY 2015 2	2	0	0	2	0	0	0	0	0	
Subtotal	480	0.4	100.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	
Total	82,101	457	248	5	55	143	45	155	9	53	93	

h) Excluding participants who have not receive the test results.

Ages are at the time when the participants underwent the testing.

### Progress Report of the Comprehensive Health Check

Reported on 25 December 2014

### 1. The implementation status in FY 2013

### Results of FY 2013

Progress Report of the Comprehensive Health Check for FY 2011 to FY 2013

										(U	nit: person, percentage)	
			FY 2011 (Co	nfirmed report values: So	ep 11 <sup>th</sup> 2012)	FY 2012 (C	onfirmed report values: J	ful 5 <sup>th</sup> 2013)	FY 2013 (Confirmed report values: Sep 1 <sup>st</sup> 2014)			
Catego	rias at		A	ge	Total	A	ge	Total	A	ge	Total	
Calego	nes, eu		<u>&lt;</u> 15	<u>&gt;</u> 16	All ages	<u>&lt;</u> 15	<u>&gt;</u> 16	All ages	<u>&lt;</u> 15	<u>&gt;</u> 16	All ages	
Number of	partici	pants	27,819	182,370	210,189	27,077	184,910	211,987	26,474	186,970	213,444	
		А	15,002	-	15,002	9,534	-	9,534	8,432	-	8,432	
	<u>&lt;</u> 15	В	2,949	-	2,949	2,283	-	2,283	1,822	-	1,822	
	years old	С	17	-	17	37	-	37	6	-	6	
		D	17,934	-	17,934	11,780	-	11,780	10,248	-	10,248	
		Е	-	8,798	8,798	-	23,907	23,907	-	25,604	25,604	
Number of examinees		F	-	-	-	-	6,692	6,692	-	5,806	5,806	
(people)	<u>&gt;</u> 16	G	-	41,949	41,949	-	10,603	10,603	-	6,767	6,767	
	years	Η	-	3,815	3,815	-	3,055	3,055	-	3,205	3,205	
	old	Ι	-	2,045	2,045	-	3,206	3,206	-	2,017	2,017	
		J	-	208	208	-	454	454	-	359	359	
		Κ	-	56,399	56,399	-	47,009	47,009	-	43,040	43,040	
		L	17,934	56,399	74,333	11,780	47,009	58,789	10,248	43,040	53,288	
The medical examin	ation consul	tation rate	64.5%	30.9%	35.4%	43.5%	25.4%	27.7%	38.7%	23.0%	25.0%	

<Chart>

- A) Children's health examination within the prefecture
- B) Children's health examination outside the prefecture
- C) Number of overlapping examinees within and outside the prefecture
- D) Subtotal (excluding the number of overlapping examinees)
- E) Health Check conducted by municipalities within the prefecture
- F) Individual examinations conducted within the prefecture
- G) Group examinations conducted within the prefecture
- H) Individual examinations conducted outside the prefecture

I)

Other (within the prefecture (cases where the municipality delegated examination to medical institutions or county/city medical associations))

Other (outside the prefecture (cases where the municipality delegated examination to examination agencies))

J) Number of overlapping examinees within and outside the prefecture

K) Subtotal (Excluding the number of overlapping examinees)

L) Total (Excluding the number of overlapping examinees)

#### [People residing within the prefecture]

For those aged 16 and older, items were added to specific health examinations held by municipalities so that the existing health examination and Comprehensive Health Check for the prefectural health survey may be conducted simultaneously. Furthermore, group health examinations were conducted 69 times at around 24 locations within the prefecture for those who could not undergo the check-ups. Also, around the same time period as the group health examinations, 510 facilities cooperated with us in order to set up a system that will allow medical facilities within the prefecture to conduct health examinations.

For children 15 and under, we requested the cooperation of pediatricians so that children's needs could be accommodated, and health examinations were conducted at 104 medical institutions within the prefecture.

#### [People evacuating outside the prefecture]

Taking into account the fact that people had evacuated to various locations in the country, health examinations were conducted with the cooperation of a total of 951 medical institutions outside the prefecture. The breakdown of institutions that cooperated is as follows: 453 medical institutions for those 16 and older; and 133 medical institutions that include a pediatric department for those 15 and under as was the case within the prefecture. Furthermore, we received cooperation from 365 medical institutions that can accommodate both age groups.

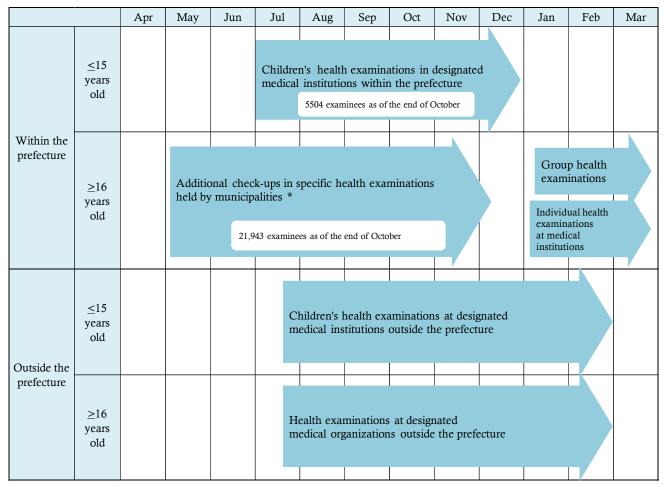
#### The medical examination consultation rate

The medical examination consultation rate for those 16 and older in FY 2013 was 23.0%. Compared to 30.9% in FY 2011 and 25.4% in FY 2012, it has decreased by 7.9 points and 2.4 points, respectively. Similarly, the medical examination consultation rate for those 15 and under was 38.7%, which has decreased by 25.8 points and 4.8 points, respectively, compared to 64.5% in FY 2011 and 43.5% in FY 2012.

### 2. Implementation status of FY 2014

### Group: 214,211 individuals

(25,883 individuals aged 15 and under, 188,328 individuals aged 16 and older)



\* Iitate (May 16-), Tamura (May 28-), Katsurao (Jun 7, 8), Kawamata (Jun 19-), Minamisoma (Jul 7-), Hirono (Jul 15-), Kawauchi (Sep 1-), Futaba (Sep 6-), Namie (Sep 20-), Naraha (Sep 26-), Tomioka (Sep 29-), Okuma (Oct 20-)

### ◆Implementation status for FY 2014

### [People residing within the prefecture]

For children 15 and under, the health exams are being conducted during an approximately 6 month period from Jul to Dec 2014 as was the case in the previous year (Number of cooperating medical institutions: 101 facilities). The number of examinees at this point is 5,504.

For those 16 and older, items are added to specific health check-ups held by municipalities as before, so that examinations can be simultaneously conducted in 12 municipalities except Date city. Furthermore, we plan to conduct group health examinations and individual health examinations at medical institutions. The number of examinees who are 16 and older is 21,943 at this point.

### [People who had evacuated outside the prefecture]

In addition to increasing the number of medical institutions that can conduct health examinations nationwide, we have sequentially sent out notices from mid-July in order to ensure early implementation starting from August. Furthermore, we will make efforts to gain cooperation from medical institutions located near regions where a significant number of people had evacuated.

### FY 2011-2013 Comprehensive Health Check of Fukushima Health Management Survey

### Consultation results basic statistics chart by health examination item

Reported on 25 December 2014

Revised on 2 February 2015

The results of FY 2011 and FY 2012 are the corrected version of the Proceedings of the 13<sup>th</sup> Prefectural Oversight Committee Meeting for Fukushima Health Management Survey.

### [Group]

Residents of nationally designated evacuation zones as of 2011 and those who were recommended to have follow-up based on the results of the Basic Survey.

### [Evacuation area, etc.]

Whole area of Tamura city, Minami-soma city, Kawamata town, Hirono town, Naraha town, Tomioka town, Kawauchi village, Okuma town, Futaba town, Namie town, Katsurao village, Iitate village and parts of Date City (belonging to designated evacuation areas)

#### [Examination item]

Age Division	Examination Item					
0-6 years old (Infant before entering school)	Height, weight, CBC (Number of red blood cells,					
	hematocrit, hemoglobin, platelet count, number of white					
	blood cells, differential white blood count.)					
7-15 years old (From 1 <sup>st</sup> to 9 <sup>th</sup> grade)	Height, weight, blood pressure,					
	CBC (Number of red blood cells, hematocrit, hemoglobin,					
	platelet count, number of white blood cells, differential					
	white blood count.)					
	[Additional items on request]					
	Blood biochemistry (AST, ALT, $\gamma$ GT, TG, HDL-C, LDL-C,					
	HbA1c, plasma glucose, serum creatinine, uric acid)					
16 years old and above	Height, weight, BMI (abdominal circumference), blood					
	pressure					
	CBC (Number of red blood cells, hematocrit, hemoglobin,					
	platelet count, number of white blood cells, differential					
	white blood count.)					
	Urinary test (urinary sugar, urine protein, urine occult					
	blood)					
	Blood biochemistry (AST, ALT, γGT, TG, HDL-C, LDL-C,					
	HbA1c, plasma glucose, serum creatinine, estimated					

glomerular filtration rate [eGFR], uric acid)
The underlined values are not routinely measured during
regular health exams.

- \*Medical examination results are divided into general age categories and, due to differences in medical checkup items, also divided into 5 age groups: 0-6 years old, 7-15 years old, 16-39 years old, 40-64 years old and 65 years old and above. This is further paired with 2 categories resulting in 10 categories, and the results were compiled for each medical checkup item.
- ※Individuals who received examination at least twice in the same year (repeated medical examinee) have been included in the total results.
- Symbols in the tables are represented in the same way as in Vital Statistics of the Ministry of Health, Labour and Welfare.
  - When there are no figures (-)
  - When there are no items (no medical checkup items due to age category) (•)
  - When it is not appropriate to express the total (...)
  - When the percentage is small (less than 0.05) (0.0%)
- \*A statistical analysis has not been conducted.
- \*There are no significant changes in the health examination targets of FY 2011-2013. Since the medical examinees differ, the time of receiving the medical examination and the medical organizations differ. Due to such modifying factors, this is not a strict comparison.

## Height

	Height (cm) (overall)									
Age	Number of	Average age	Average height							
	examinees									
0-6	6,461	3.6	98.5							
7-15	11,479	11.0	144.1							
16-39	14,762	28.1	163.2							
40-64	23,637	54.0	160.0							
65-	16,718	73.7	153.5							

		Height (c	m) (male)		
Age	Number of	Average age	Average	150 cm and	170 cm and
	examinees		height	below	above
0-6	3,271	3.6	99.2		
7-15	5,766	10.9	145.1		
16-39	5,963	27.7	170.9	0.2%	57.1%
40-64	9,560	54.5	167.5	0.4%	34.2%
65-	7,498	73.4	160.8	3.9%	6.7%

		Height (cn	n) (female)		
Age	Number of	Average age	Average	140 cm and	160 cm and
	examinees		height	below	above
0-6	3,190	3.6	97.7		
7-15	5,713	11.0	143.0		
16-39	8,799	28.3	158.0	0.1%	36.4%
40-64	14,077	53.7	154.9	0.4%	18.4%
65-	9,220	73.8	147.6	10.7%	1.6%

	Height (cr	n) (overall)	
Age	Number of	Average age	Average height
	examinees		
0-6	4,364	3.6	96.3
7-15	7,437	10.9	142.3
16-39	8,480	28.6	163.3
40-64	19,552	55.0	159.9
65-	18,632	73.5	154.0

Height (cm) (male)						
Age	Number of	Average age	Average	150 cm and	170 cm and	
	examinees		height	below	above	
0-6	2,174	3.6	97.0			
7-15	3,810	10.8	143.1			
16-39	3,230	27.9	171.3	0.3%	59.2%	
40-64	7,716	55.4	167.5	0.3%	34.6%	
65-	8,475	73.4	161.1	3.9%	7.6%	

Height (cm) (female)						
Age	Number of	Average age	Average	140 cm and	160 cm and	
	examinees		height	below	above	
0-6	2,190	3.6	95.5			
7-15	3,627	10.9	141.4			
16-39	5,250	29.1	158.3	0.1%	38.3%	
40-64	11,836	54.6	154.9	0.5%	18.5%	
65-	10,157	73.6	148.0	9.5%	1.7%	

### Height

### FY 2013

Height (cm) (overall)						
Age	Number	of	Average age		Average height	
	examinees					
0-6	3,	801		3.7	96.5	
7-15	6,4	429		10.8	141.8	
16-39	6,:	535		29.0	163.1	
40-64	16,9	922		55.3	159.8	
65-	18,9	960		73.5	154.3	

Height (cm) (male)						
Age	Number of	Average age	Average	150 cm and	170 cm and	
	examinees		height	below	above	
0-6	1,950	3.7	97.0			
7-15	3,291	10.9	143.0			
16-39	2,480	28.3	171.1	0.4%	58.8%	
40-64	6,511	55.7	167.6	0.3%	34.8%	
65-	8,636	73.4	161.4	3.4%	7.9%	

Height (cm) (female)						
Age	Number of	Average age	Average	140 cm and	160 cm and	
	examinees		height	below	above	
0-6	1.851	3.7	95.9			
7-15	3,138	10.8	140.6			
16-39	4,055	29.5	158.2	0.2%	37.2%	
40-64	10,411	55.0	155.0	0.5%	19.3%	
65-	10,324	73.5	148.4	8.6%	2.1%	

The average height of FY 2011 is 98.5 cm for ages 0-6, 144.1 cm for ages 7-15, 163.2 cm for ages 16-39, 160.0 cm for ages 40-64, and 153.5 cm for ages 65 and above. Further, the average height for males is 99.2 cm for ages 0-6, 145.1 cm for ages 7-15, 170.9 cm for ages 16-39, 167.5 cm for ages 40-64, and 160.8 cm for ages 65 and above. The average height for females is 97.7 cm for ages 0-6, 143.0 cm for ages 7-15, 158.0 cm for ages 16-39, 154.9 cm for ages 40-64, and 147.6 cm for ages 65 and above. There was no year-to-year difference of average age in each age group until FY 2013, but there has been a difference in average height for age groups 0-6 and 7-15. However, since there are modifying factors such as different times of conducting the medical exam, it is not a strict comparison. There is no change in the average height for each age group 16 and above.

- $\$  (Reference) Children's medical exam period (0-15 year olds)
  - FY 2011 : Jan-Mar 2012 FY 2012 : Jul-Dec 2012
  - FY 2013 : Jul-Dec 2013

## Weight

Weight (kg) (overall)						
Age	Number of	Average age	Average weight			
	examinees					
0-6	6,462	3.6	16.1			
7-15	11,481	11.0	40.2			
16-39	14,761	28.1	60.5			
40-64	23,637	54.0	61.2			
65-	16,722	73.7	56.8			

Weight (kg) (male)						
Age	Number of	Average age	Average	50 kg and	70 kg and	
	examinees		weight	below	above	
0-6	3,271	3.6	16.4			
7-15	5,768	10.9	41.0			
16-39	5,963	27.7	68.8	3.8%	39.8%	
40-64	9,560	54.5	69.0	1.9%	42.6%	
65-	7,499	73.4	62.7	8.1%	20.2%	

Weight (kg) (female)						
Age	Number of	Average age	Average	45 kg and	65 kg and	
	examinees		weight	below	above	
0-6	3,191	3.6	15.8			
7-15	5,713	11.0	39.5			
16-39	8,798	28.3	54.8	13.8%	14.1%	
40-64	14,077	53.7	56.0	9.1%	15.1%	
65-	9,223	73.8	52.1	19.9%	6.9%	

Weight (kg) (overall)						
Age	Number of	Average age	Average weight			
	examinees					
0-6	4,365	3.6	15.1			
7-15	7,437	10.9	38.3			
16-39	8,478	28.6	60.3			
40-64	19,553	55.0	61.1			
65-	18,683	73.5	56.9			

Weight (kg) (male)						
Age	Number of	Average age	Average	50 kg and	70 kg and	
	examinees		weight	below	above	
0-6	2,174	3.6	15.4			
7-15	3,810	10.8	39.0			
16-39	3,230	27.9	69.2	4.4%	40.9%	
40-64	7,717	55.4	68.8	2.2%	41.3%	
65-	8,479	73.4	62.5	8.5%	20.1%	

Weight (kg) (female)						
Age	Number of	Average age	Average	45 kg and	65 kg and	
	examinees		weight	below	above	
0-6	2,191	3.6	14.8			
7-15	3,627	10.9	37.5			
16-39	5,248	29.1	54.9	14.0%	14.3%	
40-64	11,836	54.6	56.1	9.4%	15.9%	
65-	10,159	73.6	52.2	20.4%	7.3%	

# Weight

Weight (kg) (overall)						
Age	Number of	Average age	Average weight			
	examinees					
0-6	3,802	3.7	15.2			
7-15	6,429	10.8	37.9			
16-39	6,534	29.0	60.2			
40-64	16,921	55.3	61.0			
65-	18,964	73.5	57.1			

	Weight (kg) (male)							
Age	Number of	Average age	Average	50 k	g and	70	kg	and
	examinees		weight	below		abo	ve	
0-6	1,951	3.7	15.5					
7-15	3,291	10.9	38.9					
16-39	2,480	28.3	69.0		4.3%		4	0.6%
40-64	6,511	55.7	69.0		2.1%		4	2.5%
65-	8,638	73.4	62.7		8.3%		2	1.0%

	Weight (kg) (female)							
Age	Number of	Average age	Average	45 kg and	65 kg and			
	examinees		weight	below	above			
0-6	1,851	3.7	14.9					
7-15	3,138	10.8	36.8					
16-39	4,054	29.5	54.9	14.6%	14.5%			
40-64	10,410	55.0	56.1	9.6%	16.2%			
65-	10,326	73.5	52.4	19.7%	7.6%			

The average weight of FY 2011 was 16.1 kg for age group 0-6, 40.2 kg for age group 7-15, 60.5 kg for age group 16-39, 61.2 kg for age group 40-64, and 56.8 kg for age group 65 and above. Furthermore, the average weight for males is 16.4 kg for age group 0-6, 41.0 kg for age group 7-15, 68.8 kg for age group 16-39, 69.0 kg for age group 40-64, and 62.7 kg for age group 65 and above. The prevalence of those weighing 70 kg and above was 39.8% for age group 16-39, 42.6% for age group 40-64, and 20.2% for age group 65 and above. The average weight of women is 15.8 kg for age group 0-6, 39.5 kg for age group 7-15, 54.8 kg for age group 16-39, 56.0 kg for age group 40-64, and 52.1 kg for age group 65 and above. Those weighing 65 kg and above were 14.1% for age group 16-39, 15.1% for age group 40-64, and 6.9% for age group 65 and above. There was no year-to-year difference of average age in each age group until FY 2013, but there was a difference in average weight among age groups 0-6 and 7-15. However, since there are modifying factors such as different medical exam times, it is not a strict comparison. There was a tendency of increase of for each age group 16 and above for males weighing 70 kg and above.

※ ⟨Reference⟩ Children's medical exam period (0-15 year olds)

FY 2011 : Jan-Mar 2012 FY 2012 : Jul-Dec 2012

FY 2013 : Jul-Dec 2013

## BMI

	BMI (weight/height <sup>2</sup> ) (overall)							
Age	Number of examinees	Average age	Average BMI	Less than 18	25 and above			
0-6	•	•	•	•	•			
7-15	•	•	•	•	•			
16-39	14,761	28.1	22.6	8.0%	22.3%			
40-64	23,637	54.0	23.8	2.8%	33.7%			
65-	16,717	73.7	24.0	2.5%	37.1%			

	BMI (weight/height <sup>2</sup> ) (male)							
Age	Number of	Average age	Average BMI	Less than 18	25 and above			
	examinees							
0-6		•	•	•				
7-15	•	•	•	•				
16-39	5,963	27.7	23.5	4.7%	29.8%			
40-64	9,560	54.5	24.6	1.1%	41.6%			
65-	7,498	73.4	24.2	1.8%	39.1%			

BMI (weight/height <sup>2</sup> ) (female)							
Age	Number of	Average age	Average BMI	Less than 18	25 and above		
	examinees						
0-6	•	•	•	•	•		
7-15	•	•	•	•			
16-39	8,798	28.3	21.9	10.2%	17.2%		
40-64	14,077	53.7	23.3	4.0%	28.4%		
65-	9,219	73.8	23.9	3.1%	35.4%		

FY 2012

	BMI (weight/height <sup>2</sup> ) (overall)						
Age	Number of examinees	Average age	Average BMI	Less than 18	25 and above		
0-6	•	•	•	•	•		
7-15	•	•	•	•	•		
16-39	8,478	28.6	22.5	8.9%	22.3%		
40-64	19,551	55.0	23.8	2.9%	33.6%		
65-	18,632	73.5	23.9	2.8%	35.2%		

	BMI (weight/height <sup>2</sup> ) (male)							
Age	Number of examinees	Average age	Average BMI	Less than 18	25 and above			
0-6	•	•	•	•				
7-15	•	•	•	•				
16-39	3,230	27.9	23.6	5.2%	30.7%			
40-64	7,716	55.4	24.5	1.2%	40.3%			
65-	8,475	73.4	24.0	2.0%	36.4%			

BMI (weight/height <sup>2</sup> ) (female)							
Age	Number of examinees	Average age	Average BMI	Less than 18	25 and above		
0-6		•	•	•			
7-15	•	•	•	•	•		
16-39	5,248	29.1	21.9	11.1%	17.1%		
40-64	11,835	54.6	23.4	4.1%	29.2%		
65-	10,157	73.6	23.8	3.4%	34.3%		

### BMI

FY 2013

	BMI (weight/height <sup>2</sup> ) (overall)							
Age	Number of	Average age	Average BMI	Less than 18	25 and above			
	examinees							
0-6	•	•	•	•	•			
7-15	•				-			
16-39	6,534	29.0	22.5	9.1%	22.1%			
40-64	16,921	55.3	23.8	3.1%	33.5%			
65-	18,960	73.5	23.9	2.9%	35.3%			

	BMI (weight/height <sup>2</sup> ) (male)							
Age	Number of	Average age	Average BMI	Less than 18	25 and above			
	examinees							
0-6	•	•	•	•	•			
7-15	•	•	•	•	•			
16-39	2,480	28.3	23.5	5.3%	30.0%			
40-64	6,511	55.7	24.5	1.2%	40.9%			
65-	8,636	73.4	24.0	2.1%	36.3%			

BMI (weight/height <sup>2</sup> ) (female)							
Age	Number of	Average age	Average BMI	Less than 18	25 and above		
	examinees						
0-6	•	•	•	•			
7-15	•	•	•	•			
16-39	4,054	29.5	21.9	11.3%	17.3%		
40-64	10,410	55.0	23.3	4.2%	28.9%		
65-	10,324	73.5	23.8	3.5%	34.4%		

Overweight individuals with a BMI of  $25 \text{ kg/m}^2$  or above for FY 2011 were 22.3% for age group 16-39 (29.8% for males and 17.2% for females), 33.7% for age group 40-64 (41.6% for males and 28.4% for females), and 37.1% for age group 65 and above (39.1% for males and 35.4% for females). On the other hand, the overweight people of FY 2013 for age groups 16-39, 40-64, and 65 and above were 22.1%, 33.5% and 35.3%, respectively. There had been a slight decrease for those in age group 65 and above, but the prevalence barely changed among overweight individuals of other age groups.

# Abdominal circumference (AC)

AC (cm) (overall)								
Age	Number of	Average age	Average AC					
	examinees							
0-6	•	•	•					
7-15			•					
16-39	2,470	29.7	78.0					
40-64	23,601	54.0	83.8					
65-	10,264	69.9	85.3					

	AC (cm) (male)					
Age	Number of	Average age	Average	85 cm and above		
	examinees		AC			
0-6	•	•	•	•		
7-15	•	•	•	•		
16-39	867	29.0	82.2	37.3%		
40-64	9,546	54.5	86.6	56.0%		
65-	4,649	69.8	86.5	58.2%		

AC (cm) (female)					
Age	Number of	Average age	Average	90 cm and above	
	examinees		AC		
0-6	•		•	•	
7-15	•	•	•	•	
16-39	1,603	30.0	75.8	9.5%	
40-64	14,055	53.7	81.9	19.5%	
65-	5,615	70.1	84.4	26.7%	

AC (cm) (overall)					
Age	Number of	Average age	Average AC		
	examinees				
0-6	•		•		
7-15	•		•		
16-39	1,971	30.0	77.6		
40-64	19,506	55.0	84.0		
65-	11,859	69.8	85.2		

	AC (cm) (male)					
Age	Number of	Average age	Average	85 cm and above		
	examinees		AC			
0-6	•	•	•			
7-15	•	•	•	•		
16-39	732	29.4	81.4	36.3%		
40-64	7,704	55.4	86.6	56.2%		
65-	5,415	69.7	86.2	56.4%		

AC (cm) (female)					
Age	Number of	Average age	Average	90 cm and above	
	examinees		AC		
0-6	•	•	•	•	
7-15	•	•	•	•	
16-39	1,239	30.4	75.4	8.6%	
40-64	11,802	54.7	82.3	20.8%	
65-	6,444	69.9	84.3	26.6%	

### AC

### FY 2013

AC (cm) (overall)					
Age	Number of	Average age	Average AC		
	examinees				
0-6		•	•		
7-15			•		
16-39	1,561	30.0	77.2		
40-64	16,904	55.3	83.8		
65-	11,958	69.6	85.1		

	AC (cm) (male)					
Age	Number of	Average age	Average	85 cm and above		
	examinees		AC			
0-6	•	•	•			
7-15	•		•	•		
16-39	584	29.6	80.4	31.7%		
40-64	6,504	55.7	86.4	55.6%		
65-	5,454	69.5	86.1	55.6%		

AC (cm) (female)					
Age	Number of	Average age	Average	90 cm and above	
	examinees		AC		
0-6	•	•	•	•	
7-15	•	•	•	•	
16-39	977	30.2	75.2	8.6%	
40-64	10,400	55.0	82.1	20.7%	
65-	6,504	69.7	84.2	26.9%	

The prevalence of AC above diagnostic criteria of metabolic syndrome (85 cm and above for males and 90 cm and above for females) for FY 2011 was: 37.3% for males and 9.5% for females for age group 16-39; 56.0% for males and 19.5% for females for age group 40-64; 58.2% for males and 26.7% for females for age group 65 and above. For FY 2012 these numbers were: 36.3% for males and 8.6% for females for age group 16-39; 56.2% for males and 20.8% for females for age group 40-64; 56.4% for males and 26.6% for females for age group 65 and above. For FY 2013 these numbers were: 31.7% for males and 8.6% for females for age group 16-39; 55.6% for males and 20.7% for females for age group 40-64; and 55.6% for males and 26.9% for females for age group 65 and above. There was almost no change for the prevalence except for males in age group 16-39. For males of age

group 16-39, the prevalence of visceral fat accumulation decreased between the two year period of FY 2011 and 2013.

## Systolic blood pressure

Systolic blood pressure (mmHg) (overall)				
Age	Number of	Average age	Average	140 mmHg and above
	examinees		systolic blood	
			pressure	
0-6	•	•	•	•
7-15	11,414	11.0	107.4	0.6%
16-39	14,757	28.1	113.7	3.3%
40-64	23,633	54.0	127.7	22.5%
65-	16,726	73.7	136.6	41.6%

Systolic blood pressure (mmHg) (male)					
Age	Number of	Average age	Average	140 mmHg and above	
	examinees		systolic blood		
			pressure		
0-6	•	•	•	•	
7-15	5,728	10.9	108.6	0.9%	
16-39	5,963	27.7	118.8	5.8%	
40-64	9,559	54.5	130.8	27.5%	
65-	7,497	73.4	137.2	43.1%	

Systolic blood pressure (mmHg) (female)					
Age	Number of	Average age	Average	140 mmHg and above	
	examinees		systolic blood		
			pressure		
0-6	•		•	•	
7-15	5,686	11.0	106.3	0.2%	
16-39	8,794	28.3	110.2	1.6%	
40-64	14,074	53.7	125.7	19.1%	
65-	9,229	73.8	136.1	40.4%	

	Systolic blood pressure (mmHg) (overall)					
Age	Number of	Average age	Average	140 mmHg and above		
	examinees		systolic blood			
			pressure			
0-6						
7-15	7,379	10.9	105.1	0.2%		
16-39	8,480	28.6	112.1	2.7%		
40-64	19,551	55.0	125.2	17.5%		
65-	18,642	73.5	133.2	32.9%		

Systolic blood pressure (mmHg) (male)				
Age	Number of	Average age	Average	140 mmHg and above
	examinees		systolic blood	
			pressure	
0-6	•	•	•	•
7-15	3,778	10.8	106.2	0.4%
16-39	3,230	27.9	117.6	4.9%
40-64	7,716	55.4	128.2	21.5%
65-	8,479	73.4	133.8	34.2%

Systolic blood pressure (mmHg) (female)				
Age	Number of	Average age	Average	140 mmHg and above
	examinees		systolic blood	
			pressure	
0-6	•	•	•	•
7-15	3,601	11.0	104.1	0.1%
16-39	5,250	29.1	108.8	1.3%
40-64	11,835	54.6	123.2	14.9%
65-	10,163	73.6	132.7	31.8%

## Systolic blood pressure

### FY 2013

Systolic blood pressure (mmHg) (overall)				
Age	Number of	Average age	Average	140 mmHg and above
	examinees		systolic blood	
			pressure	
0-6	•	•	•	•
7-15	6,404	10.8	105.2	0.2%
16-39	6,536	29.0	111.4	2.2%
40-64	16,922	55.3	124.1	15.3%
65-	18,969	73.5	131.2	28.1%

Systolic blood pressure (mmHg) (male)					
Age	Number of	Average age	Average	140 mmHg and above	
	examinees		systolic blood		
			pressure		
0-6	•		•	•	
7-15	3,276	10.9	106.3	0.3%	
16-39	2,480	28.3	116.9	4.2%	
40-64	6,513	55.7	127.3	19.0%	
65-	8,642	73.4	131.7	29.4%	

Systolic blood pressure (mmHg) (female)				
Age	Number of	Average age	Average	140 mmHg and above
	examinees		systolic blood	
			pressure	
0-6	•	•	•	•
7-15	3,128	10.8	104.1	0.1%
16-39	4,056	29.5	108.1	1.0%
40-64	10,409	55.0	122.1	12.9%
65-	10,327	73.5	130.7	27.0%

Hypertensive individuals with a systolic blood pressure of 140 mmHg or above in FY 2011 were: 3.3% for age group 16-39 (5.8% for males and 1.6% for females); 22.5% for age group 40-64 (27.5% for males and 19.1% for females); and 41.6% for age group 65 and above (43.1% for males and 40.4% for females). This increased with age and for each age group, males outnumbered females. The prevalence of hypertensive individuals gradually decreased for each age group as the group aged for both FY 2012 and FY 2013.

# Diastolic blood pressure

	Diastolic blood pressure (mmHg) (overall)					
Age	Number of	Average age	Average diastolic	90 mmHg and above		
	examinees		blood pressure			
0-6	•	•	•	•		
7-15	11,411	11.0	62.4	0.6%		
16-39	14,757	28.1	69.0	3.7%		
40-64	23,633	54.0	78.8	17.0%		
65-	16,726	73.7	78.6	15.0%		

Diastolic blood pressure (mmHg) (male)						
Age	Number of	Number of Average age Average diastolic 90 mmHg and				
	examinees		blood pressure			
0-6	•	•	•	•		
7-15	5,727	10.9	62.6	0.8%		
16-39	5,963	27.7	72.3	6.6%		
40-64	9,559	54.5	81.8	24.1%		
65-	7,497	73.4	79.7	17.9%		

Diastolic blood pressure (mmHg) (female)					
Age	Number of	Average age	Average diastolic	90 mmHg and above	
	examinees		blood pressure		
0-6	•			•	
7-15	5,684	11.0	62.2	0.4%	
16-39	8,794	28.3	66.7	1.7%	
40-64	14,074	53.7	76.8	12.2%	
65-	9,229	73.8	77.7	12.6%	

Diastolic blood pressure (mmHg) (overall)						
Age	Number of	Average age	Average diastolic	90 mmHg and above		
	examinees		blood pressure			
0-6	•	•	•			
7-15	7,379	10.9	60.9	0.3%		
16-39	8,478	28.6	67.6	2.8%		
40-64	19,551	55.0	76.9	13.1%		
65-	18,642	73.5	76.3	10.5%		

	Diastolic blood pressure (mmHg) (male)					
Age	Number of	Average age	Average diastolic	90 mmHg and above		
	examinees		blood pressure			
0-6	•	•	•	•		
7-15	3,778	10.8	61.2	0.4%		
16-39	3,230	27.9	70.7	4.8%		
40-64	7,716	55.4	79.9	18.5%		
65-	8,479	73.4	77.4	12.5%		

Diastolic blood pressure (mmHg) (female)					
Age	Number of	Average age	Average diastolic	90 mmHg and above	
	examinees		blood pressure		
0-6	•			•	
7-15	3,601	11.0	60.6	0.3%	
16-39	5,248	29.1	65.8	1.5%	
40-64	11,835	54.6	75.0	9.6%	
65-	10,163	73.6	75.4	8.7%	

# Diastolic blood pressure

#### FY 2013

Diastolic blood pressure (mmHg) (overall)					
Age	Number of	Average age	Average diastolic	90 mmHg and above	
	examinees		blood pressure		
0-6	•	•	•	•	
7-15	6,403	10.9	61.3	0.5%	
16-39	6,536	29.0	67.5	2.5%	
40-64	16,922	55.3	76.2	11.1%	
65-	18,969	73.5	75.0	8.1%	

	Diastolic blood pressure (mmHg) (male)					
Age	Number of	Average age	Average diastolic	90 mmHg and above		
	examinees		blood pressure			
0-6	•	•		•		
7-15	3,276	10.9	61.5	0.6%		
16-39	2,480	28.3	70.7	4.7%		
40-64	6,513	55.7	79.1	16.4%		
65-	8,642	73.4	76.0	9.6%		

	Diastolic blood pressure (mmHg) (female)					
Age	Number of	Average age	Average diastolic	90 mmHg and above		
	examinees		blood pressure			
0-6	•	•	•	•		
7-15	3,127	10.8	61.2	0.4%		
16-39	4,056	29.5	65.5	1.2%		
40-64	10,409	55.0	74.3	7.7%		
65-	10,327	73.5	74.2	6.7%		

Hypertensive individuals with a diastolic pressure of 90 mmHg and above for FY 2011 were: 3.7% for age group 16-39 (6.6% for males and 1.7% for females); 17.0% for age group 40-64 (24.1% for males and 12.2% for females); 15.0% for age group 65 and above (17.9% for males and 12.6% for females). This is most common among age groups 40-64, and males were more common than females for each age group. Moreover the prevalence of hypertensive individuals gradually decreased among both males and females with age for all age groups for FY 2012 and FY 2013.

# Urinary sugar

Urinary sugar (overall)							
Age	Number of	Average age	(1+)	and			
	examinees		above				
0-6	•	•					
7-15	•	•		•			
16-39	14,642	28.1		0.7%			
40-64	23,578	54.1		2.7%			
65-	16,678	73.7		3.2%			

Urinary sugar (male)							
Age	Number of	Average age	(1+) and				
	examinees		above				
0-6	•	•	•				
7-15	•						
16-39	5,963	27.7	1.1%				
40-64	9,558	54.5	4.9%				
65-	7,486	73.4	5.0%				

Urinary sugar (female)							
Age	Number of	Average age	(1+)	and			
	examinees		above				
0-6	•	•		•			
7-15	•	•		•			
16-39	8,679	28.4	0	.5%			
40-64	14,020	53.7	1.	.3%			
65-	9,192	73.8	1.	.7%			

Urinary sugar (overall)				
Age	Number of	Average age	(1+)	and
	examinees		above	
0-6	•	•		
7-15	•	•		
16-39	8,400	28.6		0.7%
40-64	19,514	55.0		2.2%
65-	18,606	73.5		2.3%

Urinary sugar (male)				
Age	Number of	Average age	(1+) and	
	examinees		above	
0-6	•	•	•	
7-15	•	•	•	
16-39	3,228	27.9	1.0%	
40-64	7,709	55.4	4.1%	
65-	8,463	73.4	3.7%	

Urinary sugar (female)					
Age	Number of	Average age	(1+)	and	
	examinees		above		
0-6	•	•		•	
7-15	•	•			
16-39	5,172	29.1		0.5%	
40-64	11,805	54.7		1.0%	
65-	10,143	73.6		1.1%	

# Urinary sugar

#### FY 2013

Urinary sugar (overall)				
Age	Number of	Average age	(1+)	and
	examinees		above	
0-6	•	•		•
7-15	•			
16-39	6,489	29.0		0.7%
40-64	16,879	55.3		1.9%
65-	18,863	73.4		2.0%

Urinary sugar (male)					
Age	Number of	Average age	(1+) and		
	examinees		above		
0-6	•	•	•		
7-15	•	•	•		
16-39	2,476	28.3	1.1%		
40-64	6,501	55.7	3.6%		
65-	8,595	73.4	3.3%		

Urinary sugar (female)				
Age	Number of	Average age	(1+) and	
	examinees		above	
0-6	•	•	•	
7-15	•	•	•	
16-39	4,013	29.5	0.4%	
40-64	10,378	55.0	0.9%	
65-	10,268	73.5	1.0%	

The prevalence of individuals that test positive for urinary sugar in FY 2011 was: 0.7% for age group 16-39 (1.1% for males and 0.5% for females), 2.7% for age group 40-64 (4.9% for males and 1.3% for females), and 3.2% of age group 65 and above (5.0% for males and 1.7% for females). The prevalence until FY 2013 did not change for those younger than 40 years old, but there was a decrease among individuals 40 years old and above.

# Urine protein

Urine protein (overall)				
Age	Number of	Average age	(1+)	and
	examinees		above	
0-6	•			
7-15	•	•		
16-39	14,642	28.1		1.1%
40-64	23,577	54.1		1.4%
65-	16,678	73.7		2.4%

Urine protein (male)				
Age	Number of	Average age	(1+)	and
	examinees		above	
0-6	•	•		•
7-15	•	•		•
16-39	5,963	27.7		1.1%
40-64	9,557	54.5		2.2%
65-	7,486	73.4		3.5%

Urine protein (female)				
Age	Number of	Average age	(1+) and	
	examinees		above	
0-6	•	•	•	
7-15	•	•	•	
16-39	8,679	28.4	1.1%	
40-64	14,020	53.7	0.8%	
65-	9,192	73.8	1.5%	

Urine protein (overall)				
Age	Number of	Average age	(1+)	and
	examinees		above	
0-6	•	•		
7-15	•	•		•
16-39	8,400	28.6		2.2%
40-64	19,515	55.0		1.7%
65-	18,606	73.5		2.7%

Urine protein (male)				
Age	Number of	Average age	(1+) and	
	examinees		above	
0-6	•	•	•	
7-15	•	•	•	
16-39	3,228	27.9	2.2%	
40-64	7,709	55.4	2.6%	
65-	8,463	73.4	3.8%	

Urine protein (female)				
Age	Number of	Average age	(1+)	and
	examinees		above	
0-6	•			•
7-15	•	•		•
16-39	5,172	29.1		2.2%
40-64	11,806	54.7		1.1%
65-	10,143	73.6		1.8%

# Urine protein

#### FY 2013

Urine protein (overall)					
Age	Number of	Average age	(1+)	and	
	examinees		above		
0-6	•	•		•	
7-15	•	•			
16-39	6,489	29.0		2.4%	
40-64	16,878	55.3		1.6%	
65-	18,863	73.4		2.6%	

Urine protein (male)					
Age	Number of	Average age	(1+) and		
	examinees	xaminees			
0-6	•	•	•		
7-15	•	•	•		
16-39	2,476	28.3	2.3%		
40-64	6,501	55.7	2.4%		
65-	8,595	73.4	3.8%		

Urine protein (female)					
Age	Number of	Average age	(1+) and		
	examinees	examinees			
0-6	•	•	•		
7-15	•	•	•		
16-39	4,013	29.5	2.5%		
40-64	10,377	55.0	1.1%		
65-	10,268	73.5	1.6%		

The prevalence by age for urine protein (1+) and above for FY 2011 was: 1.1% for age group 16-39; 1.4% for age group 40-64; 2.4% for age group 65 and above. For FY 2012 it was: 2.2% for age group 16-39; 1.7% for age group 40-64; and 2.7% for age group 65 years old and above. For FY 2013 it was: 2.4% for age group 16-39; 1.6% for age group 40-64; and 2.6% for age group 65 years old and above.

# Urine occult blood

Urine occult blood (overall)				
Age	Number of	Average age	(1+) and	(1+) and above and during
	examinees		above	time periods other than
				menstruation.
0-6	•	•	•	•
7-15	•		•	•
16-39	14,630	28.1	6.9%	3.0%
40-64	23,571	54.1	7.1%	5.6%
65-	16,678	73.7	7.4%	7.4%

Urine occult blood (male)					
Age	Number of	Average age	(1+)	and	
	examinees		above		
0-6	•			•	
7-15	•	•		•	
16-39	5,960	27.7		1.2%	
40-64	9,558	54.5		3.5%	
65-	7,486	73.4		5.5%	

	Urine occult blood (female)					
Age	Number of	Average age	(1+) and	(1+) and above and during		
	examinees		above	time periods other than		
				menstruation.		
0-6	•	•	•	•		
7-15	•	•	•			
16-39	8,670	28.4	10.7%	4.2%		
40-64	14,013	53.7	9.6%	7.0%		
65-	9,192	73.8	8.9%	8.9%		

	Urine occult blood (overall)					
Age	Number of	Average age	(1+) and	(1+) and above and during		
	examinees		above	time periods other than		
				menstruation.		
0-6	•	•	•	•		
7-15	•		•	•		
16-39	8,400	28.6	7.2%	3.2%		
40-64	19,510	55.0	6.8%	5.5%		
65-	18,592	73.5	6.9%	6.9%		

Urine occult blood (male)					
Age	Number of	Average age	(1+) and		
	examinees		above		
0-6	•		•		
7-15	•	•	•		
16-39	3,228	27.9	1.4%		
40-64	7,707	55.4	3.6%		
65-	8,459	73.4	4.9%		

Urine occult blood (female)				
Age	Number of	Average age	(1+) and	(1+) and above and during
	examinees		above	time periods other than
				menstruation.
0-6	•	•	•	•
7-15	•	•	•	•
16-39	5,172	29.1	10.9%	4.2%
40-64	11,803	54.7	8.9%	6.8%
65-	10,133	73.6	8.5%	8.5%

	Urine occult blood (overall)					
Age	Number of	Average age	(1+) and	(1+) and above and during		
	examinees		above	time periods other than		
				menstruation.		
0-6	•	•	•	•		
7-15	•	•	•	•		
16-39	6,488	29.0	7.0%	3.2%		
40-64	16,878	55.3	6.8%	5.8%		
65-	18,863	73.4	6.4%	6.4%		

Urine occult blood (male)					
Age	Number of	Average age	(1+)	and	
	examinees		above		
0-6	•			•	
7-15	•	•		•	
16-39	2,476	28.3		1.4%	
40-64	6,501	55.7		3.0%	
65-	8,595	73.4		4.5%	

Urine occult blood (female)					
Age	Number of	Average age	(1+) and	(1+) and above and during	
	examinees		above	time periods other than	
				menstruation.	
0-6	•	•		•	
7-15	•	•		•	
16-39	4,012	29.5	10.4%	4.3%	
40-64	10,377	55.0	9.1%	7.5%	
65-	10,268	73.5	8.0%	7.9%	

The prevalence for each age group in FY 2011 of urine occult blood (1+) and above omitting the time period during menstruation was: 3.0% for age groups 16-39; 5.6% for age groups 40-64; and 7.4% for age groups 65 and above. For FY 2012 the prevalence was: 3.2% for age group 16-39; 5.5% for age group 40-64; and 6.9% for age group 65 and above. For FY 2013 the prevalence was: 3.2% for age group 16-39; 5.8% for age group 40-64; and 6.4% for age group 65 and above.

# Serum creatinine

Serum creatinine (mg/dL) (overall)					
Age	Number of	Average age	Average serum		
	examinees		creatinine		
0-6	•	•	•		
7-15	11,100	11.0	0.47		
16-39	14,755	28.1	0.70		
40-64	23,651	54.0	0.73		
65-	16,724	73.7	0.78		

Serum creatinine (mg/dL) (male)						
Age	Number of	Average	Average serum	1.15 mg/dL and	1.35 mg/dL and	
	examinees	age	creatinine	above	above	
0-6	•	•	•	•	•	
7-15	5,588	10.9	0.49	0.0%	0.0%	
16-39	5,965	27.7	0.83	0.4%	0.1%	
40-64	9,562	54.5	0.86	2.4%	0.8%	
65-	7,496	73.4	0.91	7.6%	2.5%	

Serum creatinine (mg/dL) (female)						
Age	Number of	Average	Average serum	0.95 mg/dL and	1.15 mg/dL and	
	examinees	age	creatinine	above	above	
0-6	•	•	•	•	•	
7-15	5,512	11.0	0.45	-	-	
16-39	8,790	28.3	0.62	0.2%	0.0%	
40-64	14,089	53.7	0.64	0.8%	0.3%	
65-	9,228	73.8	0.69	4.4%	1.3%	

FY 2	012
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Serum creatinine (mg/dL) (overall)					
Age	Number of	Average age	Average serum		
	examinees		creatinine		
0-6	•	•			
7-15	7,212	10.9	0.48		
16-39	8,478	28.6	0.70		
40-64	19,549	55.0	0.73		
65-	18,635	73.5	0.79		

Serum creatinine (mg/dL) (male)						
Age	Number of	Average	Average serum	1.15 mg/dL and	1.35 mg/dL and	
	examinees	age	creatinine	above	above	
0-6	•	•	•	•	•	
7-15	3,694	10.9	0.49	-	-	
16-39	3,230	27.9	0.83	0.4%	0.1%	
40-64	7,717	55.4	0.86	2.7%	0.9%	
65-	8,475	73.4	0.91	8.3%	2.9%	

Serum creatinine (mg/dL) (female)						
Age	Number of	Average	Average serum	0.95 mg/dL and	1.15 mg/dL and	
	examinees	age	creatinine	above	above	
0-6	•	•	•	•	•	
7-15	3,518	11.0	0.46	-	-	
16-39	5,248	29.1	0.61	0.1%	-	
40-64	11,832	54.6	0.65	0.8%	0.3%	
65-	10,160	73.6	0.69	4.5%	1.6%	

### Serum creatinine

#### FY 2013

Serum creatinine (mg/dL) (overall)					
Age	Number of	Average age	Average serum		
	examinees		creatinine		
0-6	•	•	•		
7-15	6,095	10.9	0.47		
16-39	6,535	29.0	0.70		
40-64	16,921	55.3	0.73		
65-	18,954	73.5	0.80		

Serum creatinine (mg/dL) (male)						
Age	Number of	Average	Average	1.15 mg/dL and	1.35 mg/dL and	
	examinees	age	serum	above	above	
			creatinine			
0-6				•		
7-15	3,117	10.9	0.49	-	-	
16-39	2,479	28.3	0.83	0.6%	0.2%	
40-64	6,510	55.7	0.86	2.4%	0.6%	
65-	8,635	73.4	0.91	9.0%	3.2%	

Serum creatinine (mg/dL) (female)						
Age	Number of	Average	Average serum	0.95 mg/dL and	1.15 mg/dL and	
	examinees	age	creatinine	above	above	
0-6	•	•	•	•	•	
7-15	2,978	10.9	0.45	-	-	
16-39	4,056	29.5	0.62	0.1%	0.0%	
40-64	10,411	55.0	0.65	0.9%	0.3%	
65-	10,319	73.5	0.70	5.1%	1.5%	

The average values of serum creatinine among males in FY 2011 were: 0.83 mg/dL for age group 16-39; 0.86 mg/dL for age group 40-64; and 0.91 mg/dL for age group 65 and above. The values for FY 2012 were: 0.83 mg/dL for age group 16-39; 0.86 mg/dL for age group 40-64; 0.91 mg/dL for age group 65 and above. The values for FY 2013 were 0.83 mg/dL for age group 16-39; 0.86 mg/dL for age group 40-64; 0.91 mg/dL for age group 65 and above.

The average values of serum creatinine among females in FY 2011 were: 0.62 mg/dL for age group 16-39; 0.64 mg/dL for age group 40-64; and 0.69 mg/dL for age group 65 and above. The values for FY 2012 were: 0.61 mg/dL for age group 16-39; 0.65 mg/dL for age group 40-64; and 0.69 mg/dL for age group 65 and above. The values for FY 2013 were: 0.62 mg/dL for age group 16-39; 0.65 mg/dL for age group 40-64; and 0.70mg/dL for age group 65 and above.

The age-specific prevalence of males with 1.35 mg/dL and above serum creatinine in FY 2011 was: 0.1% for age group 16-39; 0.8% for age group 40-64; and 2.5% for age group 65 and above. For FY 2012 the prevalence was: 0.1% for age group 16-39; 0.9% for age group 40-64; and 2.9% for age group 65 and above. For FY 2013 the prevalence was: 0.2% for age group 16-39; 0.6% for age group 40-64; and 3.2% for age group 65 and above.

The age-specific prevalence of females with 1.15 mg/dL and above serum creatinine in FY 2011 was: 0.0% for age group 16-39; 0.3% for age group 40-64; and 1.3% for age group 65 and above. For FY 2012 the prevalence was: not applicable for age groups 16-39; 0.3% for age group 40-64; and 1.6% for age group 65 and above. For FY 2013 the prevalence was: 0.0% for age group 16-39; 0.3% for age group 40-64; and 1.5% for age group 65 and above.

# eGFR

eGFR (mL/min/1.73 m <sup>2</sup> ) (overall)						
Age	Number of	Average	Average	Less than 50	Less than 60	
	examinees	age	eGFR	ml/min. /1.73 m <sup>2</sup>	ml/min. /1.73 m <sup>2</sup>	
0-6				•	•	
7-15				•	•	
16-39	14,753	28.1	96.2	0.1%	0.2%	
40-64	23,651	54.0	76.9	1.2%	6.6%	
65-	16,724	73.7	66.6	9.0%	28.6%	

eGFR (mL/min/1.73 m <sup>2</sup> ) (male)						
Age	Number of	Average	Average	Less than 50	Less than 60	
	examinees	age	eGFR	ml/min. /1.73 m <sup>2</sup>	ml/min. /1.73 m <sup>2</sup>	
0-6	•					
7-15						
16-39	5,964	27.7	95.1	0.1%	0.3%	
40-64	9,562	54.5	76.2	1.5%	7.7%	
65-	7,496	73.4	67.1	8.7%	27.1%	

	eGFR (mL/min/1.73 m <sup>2</sup> ) (female)									
Age	Number of	Average	Average	Less than 50	Less than 60					
	examinees	age	eGFR m1/min. /1.73 m <sup>2</sup>		ml/min. /1.73 m <sup>2</sup>					
0-6	•	•	•							
7-15		•			•					
16-39	8,789	28.3	97.0	0.1%	0.2%					
40-64	14,089	53.7	77.3	0.9%	6.0%					
65-	9,228	73.8	66.2	9.2%	29.7%					

eGFR (mL/min/1.73 m <sup>2</sup> ) (overall)									
Age	Number of	Average	Average	Less than 50	Less than 60				
	examinees	age	eGFR	ml/min. /1.73 m <sup>2</sup>	ml/min. /1.73 m <sup>2</sup>				
0-6	•	•	•						
7-15	•	•	•		•				
16-39	8,478	28.6	96.3	0.1%	0.3%				
40-64	19,549	55.0	75.9	1.4%	8.5%				
65-	18,635	73.5	66.2	9.6%	30.7%				

eGFR (mL/min/1.73 $m^2$ ) (male)									
Age	Number of	Average	Average	Less than 50	Less than 60				
	examinees	age	eGFR m1/min. /1.73 m <sup>2</sup>		ml/min. /1.73 m <sup>2</sup>				
0-6	•	•	•	•					
7-15				•	•				
16-39	3,230	27.9	95.4	0.1%	0.3%				
40-64	7,717	55.4	76.1	1.7%	8.6%				
65-	8,475	73.4	66.9	9.3%	28.5%				

	eGFR (mL/min/1.73 m <sup>2</sup> ) (female)									
Age	Number of	Average	Average	Less than 50	Less than 60					
	examinees	age	eGFR	ml/min. /1.73 m <sup>2</sup>	ml/min. /1.73 m <sup>2</sup>					
0-6	•	•	•							
7-15					•					
16-39	5,248	29.1	96.8	0.0%	0.2%					
40-64	11,832	54.6	75.8	1.1%	8.5%					
65-	10,160	73.6	65.6	9.9%	32.4%					

### eGFR

FY 2013

eGFR (mL/min/1.73 m <sup>2</sup> ) (overall)									
Age	Number of	Average	Average	Less than 50	Less than 60				
	examinees	age	eGFR ml/min. /1.73 m		ml/min. /1.73 m <sup>2</sup>				
0-6	•								
7-15	•	•	•		•				
16-39	6,535	29.0	95.5	0.1%	0.3%				
40-64	16,919	55.3	75.4	1.3%	9.0%				
65-	18,954	73.5	65.5	10.5%	32.5%				

$eGFR (mL/min/1.73 m^2) (male)$									
Age	Number of	Average	Average	Less than 50	Less than 60				
	examinees	age	eGFR	ml/min. /1.73 m <sup>2</sup>	ml/min. /1.73 m <sup>2</sup>				
0-6	•		•	•					
7-15				•	•				
16-39	2,479	28.3	95.1	0.2%	0.4%				
40-64	6,508	55.7	75.6	1.4%	8.8%				
65-	8,635	73.4	66.3	10.2%	30.1%				

	eGFR (mL/min/1.73 m <sup>2</sup> ) (female)									
Age	Number of	Average	Average	Less than 50	Less than 60					
	examinees	age	eGFR	ml/min. /1.73 m <sup>2</sup>	m1/min. /1.73 m <sup>2</sup>					
0-6										
7-15	•				•					
16-39	4,056	29.5	95.8	0.1%	0.2%					
40-64	10,411	55.0	75.3	1.2%	9.1%					
65-	10,319	73.5	64.8	10.8%	34.5%					

The average eGFR for FY 2011 were: 96.2 mL/min/1.73 m<sup>2</sup> for age group 16-39; 76.9 mL/min/1.73 m<sup>2</sup> for age group 40-64; and 66.6 mL/min/1.73 m<sup>2</sup> for age group 65 and above. The average eGFR for FY 2012 were: 96.3 mL/min/1.73 m<sup>2</sup> for age group 16-39; 75.9 mL/min/1.73 m<sup>2</sup>, for age group 40-64; and 66.2 mL/min/1.73 m<sup>2</sup> for age group 65 and above. The average eGFR for FY 2013 were: 95.5 mL/min/1.73 m<sup>2</sup> for age group 16-39; 75.4 mL/min/1.73 m<sup>2</sup> for age group 40-64; and 65.5 mL/min/1.73 m<sup>2</sup> for age group 65 and above.

The prevalence for each age group that had less than 60 mL/min/1.73 m<sup>2</sup> eGFR in FY 2011 was: 0.2% for age group 16-39; 6.6% for age group 40-64; and 28.6% for age group 65 and above. The prevalence for FY 2012 was: 0.3% for age group 16-39; 8.5% for age group 40-64; and 30.7% for age group 65 and above. The prevalence for FY 2013 was: 0.3% for age group 16-39; 9.0% for age group 40-64; and 32.5% for age group 65 and above.

# Fasting plasma glucose

	Fasting plasma glucose (mg/dL) (overall)								
Age	Number of	Average	Average fasting	110 mg/dL	130 mg/dL	160 mg/dL			
	examinees	age	plasma glucose	and above	and above	and above			
0-6	•	•	•	•	•	•			
7-15	11,063	11.0	88.6	2.4%	0.3%	0.1%			
16-39	12,929	28.0	89.0	1.9%	0.8%	0.5%			
40-64	21,027	54.1	99.9	15.1%	5.7%	2.5%			
65-	14,744	73.6	105.5	26.1%	9.4%	3.1%			

	Fasting plasma glucose (mg/dL) (male)								
Age	Number of	Average	Average f	fasting	110 mg/dL	130 mg/dL	160 mg/dL		
	examinees	age	plasma gluc	cose	and above	and above	and above		
0-6	•	•		•	•	•	•		
7-15	5,569	10.9		89.4	2.4%	0.3%	0.1%		
16-39	5,204	27.6		91.1	2.9%	1.2%	0.7%		
40-64	8,370	54.5		104.6	22.5%	9.0%	3.8%		
65-	6,575	73.4	-	108.2	31.7%	11.9%	3.8%		

	Fasting plasma glucose (mg/dL) (female)								
Age	Number of	Average	Average fasting	110 mg/dL	130 mg/dL	160 mg/dL			
	examinees	age	plasma glucose	and above	and above	and above			
0-6	•	•		•	•	•			
7-15	5,494	11.0	87.7	2.3%	0.3%	0.1%			
16-39	7,725	28.3	87.6	1.2%	0.5%	0.3%			
40-64	12,657	53.8	96.8	10.3%	3.5%	1.7%			
65-	8,169	73.7	103.3	21.6%	7.4%	2.5%			

	Fasting plasma glucose (mg/dL) (overall)								
Age	Number of	Average	Average fasting	110 mg/dL	130 mg/dL	160 mg/dL			
	examinees	age	plasma glucose	and above	and above	and above			
0-6	•	•	•	•	•				
7-15	5,687	11.0	86.3	0.7%	0.1%	0.0%			
16-39	7,289	28.6	88.0	1.9%	0.8%	0.5%			
40-64	17,040	55.0	98.5	14.2%	5.3%	2.0%			
65-	15,855	73.4	102.7	21.8%	7.5%	2.1%			

	Fasting plasma glucose (mg/dL) (male)							
Age	Number of	Average	Average fasting	110 mg/dL	130 mg/dL	160 mg/dL		
	examinees	age	plasma glucose	and above	and above	and above		
0-6	•	•	•	•	•	•		
7-15	2,908	11.0	87.1	0.7%	0.0%	0.0%		
16-39	2,744	27.8	90.0	2.7%	1.1%	0.7%		
40-64	6,639	55.4	103.2	21.5%	8.7%	3.3%		
65-	7,189	73.3	105.2	26.7%	9.7%	2.8%		

	Fasting plasma glucose (mg/dL) (female)								
Age	Number of	Average	Average fasting	110 mg/dL	130 mg/dL	160 mg/dL			
	examinees	age	plasma glucose	and above	and above	and above			
0-6	•	•	•	•	•	•			
7-15	2,779	11.1	85.4	0.6%	0.1%	-			
16-39	4,545	29.2	86.8	1.4%	0.6%	0.5%			
40-64	10,401	54.7	95.5	9.5%	3.1%	1.2%			
65-	8,666	73.4	100.6	17.8%	5.6%	1.5%			

# Fasting plasma glucose

FY 2013

	Fasting plasma glucose (mg/dL) (overall)								
Age	Number of	Average	Average fasting	110 mg/dL	130 mg/dL	160 mg/dL			
	examinees	age	plasma glucose	and above	and above	and above			
0-6	•	•	•	•	•	•			
7-15	4,483	11.0	86.7	0.5%	0.0%	0.0%			
16-39	5,470	29.0	88.5	1.9%	0.7%	0.5%			
40-64	14,749	55.3	98.7	14.6%	5.2%	1.7%			
65-	16,158	73.2	102.7	22.4%	7.4%	1.8%			

		Fasting	plasma glucose	(mg/dL) (male	e)	
Age	Number of	Average	Average fasting	110 mg/dL	130 mg/dL	160 mg/dL
	examinees	age	plasma glucose	and above	and above	and above
0-6	•	•	•	•	•	•
7-15	2,296	11.0	87.6	0.6%	0.0%	0.0%
16-39	2,032	28.1	90.8	3.0%	1.4%	0.9%
40-64	5,562	55.7	103.1	22.1%	8.5%	2.8%
65-	7,363	73.1	105.5	28.0%	9.6%	2.5%

	Fasting plasma glucose (mg/dL) (female)								
Age	Number of	Average	Average fasting	110 mg/dL	130 mg/dL	160 mg/dL			
	examinees	age	plasma glucose	and above	and above	and above			
0-6	•	•		•					
7-15	2,187	11.0	85.9	0.5%	0.0%	-			
16-39	3,438	29.5	87.2	1.3%	0.3%	0.2%			
40-64	9,187	55.0	95.9	10.1%	3.2%	1.1%			
65-	8,795	73.2	100.4	17.7%	5.5%	1.3%			

The prevalence of individuals with impaired glucose tolerance with fasting plasma glucose of 110 mg/dL and above in FY 2011 was: 1.9% (2.9% for males and 1.2% for females) for age group 16-39; 15.1% (22.5% for males and 10.3% for females) for age group 40-64; and 26.1% (31.7% for males and 21.6% for females) for age group 65 and above. The prevalence of individuals until FY 2013 has not changed among those younger than 65, but there has been a decrease among those 65 and above.

The prevalence of individuals with poor blood sugar control at 130 mg/dL and 160 mg/dL

for fasting plasma glucose in FY 2011 was respectively: 0.8% (1.2% for males and 0.5% for females) and 0.5% (0.7% for males and 0.3% for females) for age group 16-39; 5.7% (9.0% for males and 3.5% for females) and 2.5% (3.8% for males and 1.7% for females) for age group 40-64; and 9.4% (11.9% for males and 7.4% for females) and 3.1% (3.8% for males and 2.5% for females) for age group 65 and above. The prevalence of individuals until FY 2013 did not change among those younger than 40, but there was a decrease among those 40 and above.

# HbA1c (NGSP)

	HbA1c (%) (NGSP) (overall)								
Age	Number of	Average	Average	6.0% and	7.0% and	8.0% and			
	examinees	age	HbA1c	above	above	above			
0-6	•	•	•	•	•	•			
7-15	11,084	11.0	5.3	1.0%	0.1%	0.0%			
16-39	14,755	28.1	5.1	1.6%	0.7%	0.4%			
40-64	23,650	54.0	5.5	11.8%	3.8%	1.8%			
65-	16,723	73.7	5.6	18.7%	4.7%	1.8%			

	HbA1c (%) (NGSP) (male)									
Age	Number of	Average	Average	6.0% and	7.0% and	8.0% and				
	examinees	age	HbA1c	above	above	above				
0-6	•	•	•	•	•	•				
7-15	5,578	10.9	5.3	1.2%	0.1%	0.1%				
16-39	5,966	27.7	5.1	2.1%	1.0%	0.7%				
40-64	9,562	54.5	5.5	16.1%	5.7%	2.6%				
65-	7,496	73.4	5.7	22.4%	5.9%	2.2%				

	HbA1c (%) (NGSP) (female)								
Age	Number of	Average	Average	6.0% and	7.0% and	8.0% and			
	examinees	age	HbA1c	above	above	above			
0-6	•	•	•	•	•				
7-15	5,506	11.0	5.3	0.9%	0.1%	0.0%			
16-39	8,789	28.3	5.1	1.2%	0.5%	0.3%			
40-64	14,088	53.7	5.4	8.9%	2.6%	1.2%			
65-	9,227	73.8	5.6	15.8%	3.7%	1.4%			

	HbA1c (%) (NGSP) (overall)								
Age	Number of	Average	Average	6.0% and	7.0% and	8.0% and			
	examinees	age	HbA1c	above	above	above			
0-6	•	•	•	•	•	•			
7-15	7,283	10.9	5.3	0.6%	0.1%	0.0%			
16-39	8,478	28.6	5.2	2.0%	0.7%	0.5%			
40-64	19,552	55.0	5.5	13.2%	3.5%	1.5%			
65-	18,638	73.5	5.7	20.3%	3.9%	1.3%			

	HbA1c (%) (NGSP) (male)									
Age	Number of	Average	Average	6.0% and	7.0% and	8.0% and				
	examinees	age	HbA1c	above	above	above				
0-6	•	•	•	•	•	•				
7-15	3,711	10.9	5.3	0.8%	0.1%	0.1%				
16-39	3,229	27.9	5.2	2.6%	0.7%	0.5%				
40-64	7,717	55.4	5.6	17.2%	5.1%	2.3%				
65-	8,476	73.4	5.7	22.9%	5.1%	1.6%				

	HbA1c (%) (NGSP) (female)								
Age	Number of	Average	Average	6.0% and	7.0% and	8.0% and			
	examinees	age	HbA1c	above	above	above			
0-6	•	•	•	•	•	•			
7-15	3,527	11.0	5.3	0.5%	0.1%	-			
16-39	5,249	29.1	5.2	1.6%	0.6%	0.5%			
40-64	11,835	54.6	5.5	10.6%	2.4%	1.0%			
65-	10,162	73.6	5.6	18.2%	3.0%	1.1%			

## HbA1c (NGSP)

#### FY 2013

	HbA1c (%) (NGSP) (overall)									
Age	Number of	Average	Average	6.0% and	7.0% and	8.0% and				
	examinees	age	HbA1c	above	above	above				
0-6	•	•	•	•	•					
7-15	6,290	10.9	5.3	0.5%	0.0%	0.0%				
16-39	6,536	29.0	5.2	2.2%	0.6%	0.4%				
40-64	16,919	55.3	5.6	15.4%	3.7%	1.5%				
65-	18,956	73.5	5.8	24.0%	4.5%	1.2%				

	HbA1c (%) (NGSP) (male)									
Age	Number of	Average	Average	6.0% and	7.0% and	8.0% and				
	examinees	age	HbA1c	above	above	above				
0-6	•	•	•	•	•	•				
7-15	3,218	10.9	5.3	0.4%	0.1%	0.0%				
16-39	2,480	28.3	5.2	2.8%	0.8%	0.7%				
40-64	6,508	55.7	5.7	18.9%	5.4%	2.2%				
65-	8,637	73.4	5.8	26.7%	5.6%	1.4%				

HbA1c (%) (NGSP) (female)								
Age	Number of	Average	Average	6.0% and	7.0% and	8.0% and		
	examinees	age	HbA1c	above	above	above		
0-6	•	•	•	•	•	•		
7-15	3,072	10.9	5.3	0.6%	-	-		
16-39	4,056	29.5	5.2	1.8%	0.4%	0.3%		
40-64	10,411	55.0	5.6	13.2%	2.7%	1.1%		
65-	10,319	73.5	5.7	21.8%	3.5%	1.0%		

The prevalence of individuals with impaired glucose tolerance of HbA1c 6.0% and above in FY 2011 was: 1.6% (2.1% for males and 1.2% for females) for age group 16-39; 11.8% (16.1% for males and 8.9% for females) for age group 40-64; and 18.7% (22.4% for males and 15.8% for females) for age group 65 and above. The prevalence increased until FY 2013, but the prevalence of HbA1c 7.0% and above and 8.0% and above for FY 2011 was: 0.7% (1.0% for males and 0.5% for females) and 0.4% (0.7% for males and 0.3% for females) for age group 16-39; 3.8% (5.7% for males and 2.6% for females) and 1.8% (2.6% for males and 1.2% for

females) for age group 40-64; 4.7% (5.9% for males and 3.7% for females) and 1.8% (2.2% for males and 1.4% for females) for age group 65 and above. The prevalence decreased until FY 2013 and the decrease of prevalence of individuals with poor blood sugar control of HbA1c 8.0% and above was prominent.

# HDL-C

HDL-C (mg/dL) (overall)							
Age	Number of	Average age	Average	Less than 40 mg/dL			
	examinees		HDL-C				
0-6	•		•	•			
7-15	11,101	11.0	62.5	2.9%			
16-39	14,757	28.1	62.1	4.0%			
40-64	23,651	54.0	61.4	5.8%			
65-	16,725	73.7	57.6	8.5%			

HDL-C (mg/dL) (male)							
Age	Number of	Average age	Average	Less than 40 mg/dL			
	examinees		HDL-C				
0-6	•	•	•				
7-15	5,586	10.9	62.2	3.1%			
16-39	5,966	27.7	56.2	7.5%			
40-64	9,562	54.5	55.7	10.6%			
65-	7,496	73.4	54.2	13.3%			

HDL-C (mg/dL) (female)							
Age	Number of	Average age	Average	Less than 40 mg/dL			
	examinees		HDL-C				
0-6	•	•	•	•			
7-15	5,515	11.0	62.7	2.8%			
16-39	8,791	28.3	66.1	1.7%			
40-64	14,089	53.7	65.3	2.5%			
65-	9,229	73.8	60.4	4.6%			

HDL-C (mg/dL) (overall)							
Age	Number of	Average age	Average	Less than 40 mg/dL			
	examinees		HDL-C				
0-6	•	•	•				
7-15	7,243	10.9	61.3	2.7%			
16-39	8,479	28.6	62.0	4.3%			
40-64	19,551	55.0	60.7	6.4%			
65-	18,638	73.5	57.2	8.7%			

HDL-C (mg/dL) (male)							
Age	Number of	Average age	Average	Less than 40 mg/dL			
	examinees		HDL-C				
0-6	•	•	•				
7-15	3,711	10.9	61.4	3.1%			
16-39	3,230	27.9	55.9	8.1%			
40-64	7,716	55.4	55.6	11.6%			
65-	8,476	73.4	54.0	13.0%			

HDL-C (mg/dL) (female)							
Age	Number of	Average age	Average	Less than 40 mg/dL			
	examinees		HDL-C				
0-6	•	•	•	•			
7-15	3,532	11.0	61.1	2.3%			
16-39	5,249	29.1	65.7	1.9%			
40-64	11,835	54.6	64.1	3.0%			
65-	10,162	73.6	59.8	5.1%			

### HDL-C

FY 2013

HDL-C (mg/dL) (overall)								
Age	Number of	Average age	Average	Less than 40 mg/dL				
	examinees		HDL-C					
0-6	•	•	•	•				
7-15	6,291	10.9	61.5	2.9%				
16-39	6,536	29.0	62.2	4.1%				
40-64	16,921	55.3	61.7	5.5%				
65-	18,957	73.5	58.0	7.6%				

HDL-C (mg/dL) (male)							
Age	Number of	Average age	Average	Less than 40 mg/dL			
	examinees		HDL-C				
0-6	•	•	•				
7-15	3,219	10.9	61.7	3.1%			
16-39	2,480	28.3	56.0	8.1%			
40-64	6,510	55.7	56.1	10.5%			
65-	8,637	73.4	54.7	11.7%			

HDL-C (mg/dL) (female)							
Age	Number of	Average age	Average	Less than 40 mg/dL			
	examinees		HDL-C				
0-6	•	•	•				
7-15	3,072	10.9	61.3	2.7%			
16-39	4,056	29.5	65.9	1.7%			
40-64	10,411	55.0	65.2	2.4%			
65-	10,320	73.5	60.8	4.2%			

The prevalence of individuals suffering from hypertriglyceridemia with less than HDL-C 40 mg/dL in FY 2011 was: 2.9% (3.1% for males and 2.8% for females) for age group 7-15; 4.0% (7.5% for males and 1.7% for females) for age group 16-39; 5.8% (10.6% for males and 2.5% for females) for age group 40-64; and 8.5% (13.3% for males and 4.6% for females) for age group 65 and above. The prevalence of the age group 65 and above barely changed until FY 2013.

# Triglyceride (TG)

Triglyceride (TG) (mg/dL) (overall)							
Age	Number of	Average	Average	150 mg/dL and	300 mg/dL and		
	examinees	age	triglyceride	above	above		
0-6	•	•	•	•	•		
7-15	11,091	11.0	76.5	7.0%	0.6%		
16-39	14,757	28.1	88.5	11.4%	1.7%		
40-64	23,651	54.0	117.8	21.3%	3.2%		
65-	16,725	73.7	114.7	20.3%	1.6%		

Triglyceride (TG) (mg/dL) (male)							
Age	Number of	Average	Average	150 mg/dL and	300 mg/dL and		
	examinees	age	age triglyceride a		above		
0-6	•	•	•	•	•		
7-15	5,584	10.9	75.5	7.7%	0.6%		
16-39	5,966	27.7	109.3	19.0%	3.2%		
40-64	9,562	54.5	142.3	31.5%	6.0%		
65-	7,496	73.4	119.6	23.1%	2.5%		

	Triglyceride (TG) (mg/dL) (female)							
Age	Number of	Average	Average	150 mg/dL and	300 mg/dL and			
	examinees	age	triglyceride	above	above			
0-6	•	•	•	•	•			
7-15	5,507	11.0	77.5	6.3%	0.5%			
16-39	8,791	28.3	74.3	6.2%	0.6%			
40-64	14,089	53.7	101.1	14.4%	1.3%			
65-	9,229	73.8	110.7	18.1%	1.0%			

Triglyceride (TG) (mg/dL) (overall)							
Age	Number of	Average	Average	150 mg/dL and	300 mg/dL and		
	examinees	age	triglyceride	above	above		
0-6	•	•		•	•		
7-15	7,242	10.9	77.0	7.1%	0.7%		
16-39	8,480	28.6	89.5	11.7%	1.6%		
40-64	19,552	55.0	117.0	21.5%	3.2%		
65-	18,638	73.5	110.8	17.9%	1.6%		

	Triglyceride (TG) (mg/dL) (male)							
Age	Number of	Average	Average	150 mg/dL and	300 mg/dL and			
	examinees	age	triglyceride	above	above			
0-6	•	•	•	•	•			
7-15	3,711	10.9	75.9	7.7%	0.6%			
16-39	3,230	27.9	111.7	19.9%	3.0%			
40-64	7,717	55.4	140.0	32.0%	5.9%			
65-	8,476	73.4	115.3	20.5%	2.2%			

	Triglyceride (TG) (mg/dL) (female)							
Age	Number of	Average	Average	150 mg/dL and	300 mg/dL and			
	examinees	age	triglyceride	above	above			
0-6	•	•	•	•	•			
7-15	3,531	11.0	78.1	6.5%	0.7%			
16-39	5,250	29.1	75.8	6.7%	0.7%			
40-64	11,835	54.6	102.0	14.6%	1.4%			
65-	10,162	73.6	107.1	15.7%	1.0%			

# Triglyceride (TG)

FY 2013

Triglyceride (TG) (mg/dL) (overall)							
Age	Number of	Average	Average	150 mg/dL and	300 mg/dL and		
	examinees	age	triglyceride	above	above		
0-6	•	•	•	•	•		
7-15	6,290	10.9	78.7	7.3%	0.7%		
16-39	6,536	29.0	90.9	11.8%	2.0%		
40-64	16,919	55.3	117.4	21.5%	3.3%		
65-	18,957	73.5	112.6	18.4%	1.6%		

	Triglyceride (TG) (mg/dL) (male)							
Age	Number of	Average	Average	150 mg/dL and	300 mg/dL and			
	examinees	age	triglyceride	above	above			
0-6	•	•	•	•	•			
7-15	3,219	10.9	77.6	7.6%	0.6%			
16-39	2,480	28.3	115.8	20.5%	4.2%			
40-64	6,509	55.7	140.8	30.9%	6.2%			
65-	8,637	73.4	116.5	20.5%	2.2%			

	Triglyceride (TG) (mg/dL) (female)							
Age	Number of	Average	Average	150 mg/dL and	300 mg/dL and			
	examinees	age	triglyceride	above	above			
0-6	•	•	•	•	•			
7-15	3,071	10.9	79.7	7.0%	0.7%			
16-39	4,056	29.5	75.7	6.4%	0.6%			
40-64	10,410	55.0	102.8	15.6%	1.5%			
65-	10,320	73.5	109.4	16.6%	1.2%			

The prevalence of individuals with hypertriglyceridemia of 150 mg/dL and above in FY 2011 was: 7.0% (7.7% for males and 6.3% for females) for age group 7-15; 11.4% (19.0% for males and 6.2% for females) for age group 16-39; 21.3% (31.5% for males and 14.4% for females) for age group 40-64; and 20.3% (23.1% for males and 18.1% for females) for age group 65 and above. There was a slight decrease in the age group 65 and above for FY 2012, that was followed by a period of no change until FY 2013.

# LDL-C

	LDL-C (mg/dL) (overall)							
Age	Number of	Average	Average	120 mg/dL and	140 mg/dL and			
	examinees	age	LDL-C	above	above			
0-6	•	•	•	•	•			
7-15	11,098	11.0	94.1	13.2%	3.5%			
16-39	14,757	28.1	110.1	33.9%	15.9%			
40-64	23,651	54.0	129.3	59.8%	35.8%			
65-	16,725	73.7	122.9	52.8%	28.6%			

	LDL-C (mg/dL) (male)							
Age	Number of	Average	Average	120 mg/dL and	140 mg/dL and			
	examinees	age	LDL-C	above	above			
0-6	•	•	•	•	•			
7-15	5,587	10.9	91.9	11.7%	3.3%			
16-39	5,966	27.7	114.6	40.2%	21.0%			
40-64	9,562	54.5	126.9	57.8%	34.2%			
65-	7,496	73.4	118.6	48.0%	24.6%			

	LDL-C (mg/dL) (female)							
Age	Number of	Average	Average	120 mg/dL and	140 mg/dL and			
	examinees	age	LDL-C	above	above			
0-6	•	•	•	-	-			
7-15	5,511	11.0	96.3	14.8%	3.6%			
16-39	8,791	28.3	107.0	29.6%	12.4%			
40-64	14,089	53.7	130.9	61.1%	37.0%			
65-	9,229	73.8	126.4	56.7%	31.7%			

	LDL-C (mg/dL) (overall)							
Age	Number of	Average	Average	120 mg/dL and	140 mg/dL and			
	examinees	age	LDL-C	above	above			
0-6	•	•	•	•	•			
7-15	7,240	10.9	93.7	12.2%	3.4%			
16-39	8,479	28.6	109.3	32.7%	15.7%			
40-64	19,550	55.0	126.0	56.0%	31.6%			
65-	18,638	73.5	118.0	46.7%	22.3%			

LDL-C (mg/dL) (male)								
Age	Number of	Average	Average	120 mg/dL and	140 mg/dL and			
	examinees	age	LDL-C	above	above			
0-6	•	•	•	•	•			
7-15	3,710	10.9	91.9	10.7%	3.2%			
16-39	3,230	27.9	114.2	39.0%	21.2%			
40-64	7,716	55.4	123.7	53.6%	29.6%			
65-	8,476	73.4	113.8	41.8%	18.4%			

LDL-C (mg/dL) (female)								
Age	Number of	Average	Average	120 mg/dL and	140 mg/dL and			
	examinees	age	LDL-C	above	above			
0-6	•	•	•	•	•			
7-15	3,530	11.0	95.6	13.9%	3.6%			
16-39	5,249	29.1	106.3	28.9%	12.3%			
40-64	11,834	54.6	127.6	57.6%	32.9%			
65-	10,162	73.6	121.6	50.8%	25.6%			

# LDL-C

FY 2013

LDL-C (mg/dL) (overall)								
Age	Number of	Average	Average	120 mg/dL and	140 mg/dL and			
	examinees	age	LDL-C	above	above			
0-6	•	•	•	•	•			
7-15	6,291	10.9	94.1	13.8%	3.9%			
16-39	6,536	29.0	110.4	34.5%	15.6%			
40-64	16,921	55.3	126.8	57.2%	32.6%			
65-	18,957	73.5	119.1	47.9%	23.2%			

LDL-C (mg/dL) (male)								
Age	Number of	Average	Average	120 mg/dL and	140 mg/dL and			
	examinees	age	LDL-C	above	above			
0-6	•	•	•	•	•			
7-15	3,219	10.9	92.6	12.3%	4.2%			
16-39	2,480	28.3	114.1	40.0%	19.5%			
40-64	6,510	55.7	123.9	54.3%	30.0%			
65-	8,637	73.4	114.6	42.8%	18.8%			

LDL-C (mg/dL) (female)								
Age	Number of	Average	Average	120 mg/dL and	140 mg/dL and			
	examinees	age	LDL-C	above	above			
0-6	•			•	•			
7-15	3,072	10.9	95.8	15.4%	3.5%			
16-39	4,056	29.5	108.2	31.2%	13.2%			
40-64	10,411	55.0	128.6	59.1%	34.1%			
65-	10,320	73.5	122.9	52.3%	26.9%			

The prevalence of individuals with hyper-LDL-cholesterolemia of 120 mg/dL and above for FY 2011 was: 13.2% (11.7% for males and 14.8% for females) for age group 7-15; 33.9% (40.2% for males and 29.6% for females) for age group 16-39; 59.8% (57.8% for males and 61.1% for females) for age group 40-64; and 52.8% (48.0% for males and 56.7% for females) for age group 65 and above. There was a slight decrease of individuals 65 and above in FY 2012, followed by a period of no change until FY 2013.

# AST

AST (U/L) (overall)								
Age	Number of	Average	Average	31 U/L and	51  U/L and above			
	examinees	age	AST	above				
0-6	•	•	•	•	•			
7-15	11,103	11.0	23.6	9.6%	0.8%			
16-39	14,757	28.1	20.6	8.2%	2.0%			
40-64	23,651	54.0	24.2	14.5%	2.8%			
65-	16,725	73.7	25.7	17.7%	2.8%			

AST (U/L) (male)								
Age	Number of	Average	Average	31	U/L	and	51  U/L and above	
	examinees	age	AST	above				
0-6	•	•	•			•	•	
7-15	5,588	10.9	25.1			12.8%	1.3%	
16-39	5,966	27.7	24.2			15.3%	3.8%	
40-64	9,562	54.5	26.9			21.4%	4.3%	
65-	7,496	73.4	27.2		,	23.0%	3.7%	

AST (U/L) (female)								
Age	Number of	Average	Average	31	U/L	and	51 U/L and above	
	examinees	age	AST	abov	re			
0-6	•	•	•			•	•	
7-15	5,515	11.0	22.0			6.4%	0.4%	
16-39	8,791	28.3	18.2			3.4%	0.8%	
40-64	14,089	53.7	22.3			9.7%	1.8%	
65-	9,229	73.8	24.5			13.4%	2.2%	

	AST (U/L) (overall)									
Age	Number of	Average	Average	31 U/L and	51  U/L and above					
	examinees	age	AST	above						
0-6	•	•	•	•	•					
7-15	7,243	10.9	24.1	10.6%	0.8%					
16-39	8,479	28.6	20.8	8.7%	1.8%					
40-64	19,552	55.0	24.7	15.8%	3.0%					
65-	18,638	73.5	26.4	19.5%	2.8%					

	AST (U/L) (male)									
Age	Number of	Average	Average	31	U/L	and	51  U/L and above			
	examinees	age	AST	above						
0-6	•	•	•			•	•			
7-15	3,711	10.9	25.6		1	4.1%	1.2%			
16-39	3,229	27.9	24.6		1	6.6%	3.3%			
40-64	7,717	55.4	27.6		2	3.7%	4.4%			
65-	8,476	73.4	27.8		2	5.1%	3.6%			

		AST	' (U/L) (fema	ule)			
Age	Number of	Average	Average	31	U/L	and	51 U/L and above
	examinees	age	AST	abov	e		
0-6	•	•	•			•	•
7-15	3,532	11.0	22.6			7.0%	0.5%
16-39	5,250	29.1	18.5			3.8%	0.9%
40-64	11,835	54.6	22.8			10.6%	2.1%
65-	10,162	73.6	25.2			14.8%	2.2%

## AST

#### FY 2013

	AST (U/L) (overall)									
Age	Number of	Average	Average	31 U/L and	51 U/L and above					
	examinees	age	AST	above						
0-6	•	•	•	•	•					
7-15	6,291	10.9	24.0	10.5%	0.7%					
16-39	6,536	29.0	20.6	8.4%	2.0%					
40-64	16,919	55.3	24.1	14.1%	2.8%					
65-	18,957	73.5	25.6	16.8%	2.6%					

	AST (U/L) (male)									
Age	Number of	Average	Average	31	U/L	and	51  U/L and above			
	examinees	age	AST	above						
0-6	•	•	•				•			
7-15	3,219	10.9	25.5			14.4%	1.1%			
16-39	2,480	28.3	24.1			15.7%	3.6%			
40-64	6,509	55.7	26.8		,	20.9%	4.3%			
65-	8,637	73.4	26.8		,	21.4%	3.2%			

		AST	' (U/L) (fema	ule)			
Age	Number of	Average	Average	31	U/L	and	51  U/L and above
	examinees	age	AST	above			
0-6	•	•	•			•	•
7-15	3,072	10.9	22.4			6.4%	0.3%
16-39	4,056	29.5	18.4			3.9%	1.0%
40-64	10,410	55.0	22.4			9.8%	1.9%
65-	10,320	73.5	24.6			13.0%	2.0%

Results above the reference inferral for AST (i.e.,  $\geq$ 51 U/L) in FY 2013 were found in: 2.0% of those aged 16-39, 2.8% aged 40-64, and 2.6% aged 65 and above. Further the frequency base on gender for each age group were: 3.6% for males and 1.0% for females for age group 16-39; 4.3% for males and 1.9% for females for age group 40-64; and 3.2% for males and 2.0% for females for age group 65 and above. Males had a higher frequency compared to females. The transition of frequency based on age groups for FY 2011, 2012 and 2013 were respectively: (2.0% $\rightarrow$ 1.8% $\rightarrow$ 2.0%) for age group 16-39; (2.8% $\rightarrow$ 3.0% $\rightarrow$ 2.8%) for age group 40-64; and (2.8% $\rightarrow$ 2.8% $\rightarrow$ 2.6%) for age group 65 and above.

# ALT

		ALT	(U/L) (over	all)	
Age	Number of	Average	Average	31 U/L and	51  U/L and above
	examinees	age	ALT	above	
0-6	•	•	•	•	•
7-15	11,103	11.0	15.7	4.5%	1.6%
16-39	14,757	28.1	21.8	15.9%	7.0%
40-64	23,651	54.0	24.5	20.8%	6.9%
65-	16,725	73.7	20.9	13.6%	3.7%

	ALT (U/L) (male)									
Age	Number of	Average	Average	31	U/L	and	51  U/L and above			
	examinees	age	ALT	abov	re					
0-6	•	•	•			•	•			
7-15	5,588	10.9	17.8			7.0%	2.6%			
16-39	5,966	27.7	31.4		ź	31.0%	14.1%			
40-64	9,562	54.5	30.3			32.8%	11.3%			
65-	7,496	73.4	23.5			18.8%	5.2%			

	ALT (U/L) (female)									
Age	Number of	Average	Average	31	U/L	and	51 U/L and above			
	examinees	age	ALT	abov	re					
0-6	•	•	•			•	•			
7-15	5,515	11.0	13.6			2.0%	0.7%			
16-39	8,791	28.3	15.3			5.6%	2.2%			
40-64	14,089	53.7	20.5			12.7%	3.9%			
65-	9,229	73.8	18.8			9.5%	2.6%			

	ALT (U/L) (overall)									
Age	Number of	Average	Average	31 U/L and	51  U/L and above					
	examinees	age	ALT	above						
0-6	•	•	•	•	•					
7-15	7,243	10.9	15.7	4.8%	1.4%					
16-39	8,480	28.6	21.8	16.9%	7.0%					
40-64	19,552	55.0	24.7	21.4%	7.1%					
65-	18,638	73.5	21.6	14.2%	3.6%					

	ALT (U/L) (male)									
Age	Number of	Average	Average	31	U/L	and	51  U/L and above			
	examinees	age	ALT	abov	re					
0-6	•	•	•				•			
7-15	3,711	10.9	17.8			7.4%	2.2%			
16-39	3,230	27.9	31.8		ź	33.6%	14.7%			
40-64	7,717	55.4	30.7			33.8%	11.6%			
65-	8,476	73.4	24.0			19.5%	4.9%			

	ALT (U/L) (female)									
Age	Number of	Average	Average	31	U/L	and	51 U/L and above			
	examinees	age	ALT	abov	<i>r</i> e					
0-6	•	•	•			•	•			
7-15	3,532	11.0	13.5			2.0%	0.5%			
16-39	5,250	29.1	15.7			6.5%	2.3%			
40-64	11,835	54.6	20.8			13.3%	4.2%			
65-	10,162	73.6	19.5			9.8%	2.6%			

## ALT

#### FY 2013

	ALT (U/L) (overall)											
Age	Number of	Average	Average 31 U/L and			51  U/L and above						
	examinees	age	ALT	abov	/e							
0-6	•	•	•			•	•					
7-15	6,291	10.9	15.7			4.7%	1.6%					
16-39	6,536	29.0	21.8			16.1%	6.8%					
40-64	16,919	55.3	24.1			20.0%	6.7%					
65-	18,957	73.5	21.0			13.0%	3.1%					

	ALT (U/L) (male)											
Age	Number of	Average	Average	31	U/L	and	51  U/L and above					
	examinees	age	ALT	abov	/e							
0-6	•	•	•				•					
7-15	3,219	10.9	18.0			7.5%	2.6%					
16-39	2,480	28.3	31.3			31.6%	14.0%					
40-64	6,509	55.7	29.7			31.6%	11.2%					
65-	8,637	73.4	23.0			17.1%	4.2%					

	ALT (U/L) (female)											
Age	Number of	Average	Average	31	U/L	and	51  U/L and above					
	examinees	age	ALT	abov	/e							
0-6	•	•	•			•	•					
7-15	3,072	10.9	13.3			1.8%	0.5%					
16-39	4,056	29.5	15.9			6.7%	2.5%					
40-64	10,410	55.0	20.6			12.7%	3.9%					
65-	10,320	73.5	19.3			9.5%	2.3%					

The prevalence of individuals with an ALT of 51 U/L and above in FY 2013 was: 6.8% for age group 16-39; 6.7% for age group 40-64; and 3.1% for age group 65 and above. Furthermore, the frequency based on gender is 14.0% for males and 2.5% for females for age group 16-39; 11.2% for males and 3.9% for females for age group 40-64; and 4.2% for males and 2.3% for females for age group 65 and above. Males had higher frequencies compared to women, and the age group 65 and above had lower frequencies. The transition based on age group for FY 2011, 2012 and 2013 were respectively:  $(7.0\% \rightarrow 7.0\% \rightarrow 6.8\%)$  for age group 16-39;  $(6.9\% \rightarrow 7.1\% \rightarrow 6.7\%)$  for age group 40-64; and  $(3.7\% \rightarrow 3.6\% \rightarrow 3.1\%)$  for age group 65 and above.

# γ**-**GT

FY 2011	
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	γ-GT (U/L) (overall)												
Age	Number of	Average	Average	51 U/L and	101 U/L and								
	examinees	age	γ <b>-</b> GT	above	above								
0-6	•	•	•	•	•								
7-15	11,101	11.0	14.6	0.6%	0.1%								
16-39	14,757	28.1	25.4	8.5%	2.5%								
40-64	23,651	54.0	39.7	19.9%	6.2%								
65-	16,725	73.7	32.8	13.4%	3.7%								

	γ-GT (U/L) (male)												
Age	Number of	Average	Average	51	U/L	and	101	U/L	and				
	examinees	age	γ <b>-</b> GT	abov	<i>v</i> e		above						
0-6	•	•	•			•			•				
7-15	5,587	10.9	16.0			1.0%			0.1%				
16-39	5,966	27.7	37.2			17.2%			5.4%				
40-64	9,562	54.5	58.8			35.6%			12.3%				
65-	7,496	73.4	44.2			22.4%			6.9%				

	γ-GT (U/L) (female)											
Age	Number of	Average	Average	51	U/L	and	101	U/L	and			
	examinees	age	γ <b>-</b> GT	abov	re		above					
0-6	•	•	•			•			•			
7-15	5,514	11.0	13.2			0.2%			0.0%			
16-39	8,791	28.3	17.3			2.5%			0.5%			
40-64	14,089	53.7	26.8			9.3%			2.1%			
65-	9,229	73.8	23.6			6.0%			1.1%			

	γ-GT (U/L) (overall)												
Age	Number of	Average	Average	51 U/L and	101 U/L and								
	examinees	age	γ <b>-</b> GT	above	above								
0-6	•	•	•		•								
7-15	7,242	10.9	14.7	0.4%	0.1%								
16-39	8,480	28.6	25.6	8.8%	2.5%								
40-64	19,552	55.0	40.5	20.4%	6.5%								
65-	18,638	73.5	33.4	14.0%	3.8%								

	γ-GT (U/L) (male)											
Age	Number of	Average	Average	51	U/L	and	101	U/L	and			
	examinees	age	γ <b>-</b> GT	abov	/e		above					
0-6	•	•	•			•						
7-15	3,710	10.9	16.0			0.7%			0.2%			
16-39	3,230	27.9	38.0			18.5%			5.4%			
40-64	7,717	55.4	60.7			36.9%			12.8%			
65-	8,476	73.4	44.1			23.1%			6.7%			

	γ-GT (U/L) (female)											
Age	Number of	Average	Average	51	U/L	and	101	U/L	and			
	examinees	age	γ <b>-</b> GT	abov	e		above					
0-6	•	•	•			•			•			
7-15	3,532	11.0	13.3			0.1%			-			
16-39	5,250	29.1	17.9			2.8%			0.6%			
40-64	11,835	54.6	27.3			9.7%			2.4%			
65-	10,162	73.6	24.4			6.5%			1.5%			

# $\gamma$ -GT

	$\gamma$ -GT (U/L) (overall)											
Age	Number of	Average	Average	51	U/L	and	101	U/L	and			
	examinees	age	γ <b>-</b> GT	abov	/e		above					
0-6	•	•	•			•			•			
7-15	6,291	10.9	14.4			0.4%			0.0%			
16-39	6,535	29.0	26.0			9.1%			2.7%			
40-64	16,919	55.3	39.3			19.5%			6.2%			
65-	18,956	73.5	33.7			13.9%			3.9%			

	$\gamma$ -GT (U/L) (male)											
Age	Number of	Average	Average	51	U/L	and	101	U/L	and			
	examinees	age	γ <b>-</b> GT	abov	/e		above					
0-6	•	•	•						•			
7-15	3,219	10.9	15.7			0.8%			0.1%			
16-39	2,480	28.3	38.8			18.8%			5.9%			
40-64	6,509	55.7	58.9			35.1%			12.3%			
65-	8,637	73.4	44.4			22.6%			6.8%			

	γ-GT (U/L) (female)									
Age	Number of	Average	verage Average 5		U/L	and	101	U/L	and	
	examinees	age	γ-GT		r-GT above		above			
0-6	•	•								
7-15	3,072	10.9	13.0			0.1%			0.0%	
16-39	4,055	29.5	18.2		3.1%				0.7%	
40-64	10,410	55.0	27.1			9.7%			2.4%	
65-	10,319	73.5	24.7			6.6%			1.4%	

Individuals with 101 U/L and above  $\gamma$ -GT in FY 2013 were: 2.7% for age group 16-39; 6.2% for age group 40-64; and 3.9% for age group 65 and above. Furthermore the frequencies based on gender were: 5.9% for males and 0.7% for females for age group 16-39; 12.3% for males and 2.4% for females for age group 40-64; and 6.8% for males and 1.4% for females for age group 65 and above. The frequencies for males were higher compared to females. The transition based on age group for FY 2011, 2012 and 2013 were respectively:  $(2.5\% \rightarrow 2.5\% \rightarrow 2.7\%)$  for age group 16-39;  $(6.2\% \rightarrow 6.5\% \rightarrow 6.2\%)$  for age group 40-64; and  $(3.7\% \rightarrow 3.8\% \rightarrow 3.9\%)$  for age group 65 and above.

# Uric acid

	Uric acid (mg/dL) (overall)								
Age	Number of	Average	Average	7.1 mg/dL and	8.0 mg/dL and				
	examinees	age	uric acid	above	above				
0-6	•	• • •		•	•				
7-15	11,091	11.0	4.5	2.5%	0.6%				
16-39	14,757	28.1	5.0	7.9%	2.7%				
40-64	23,651	54.0	5.0	8.0%	2.7%				
65-	16,725	73.7	5.1	7.6%	2.5%				

	Uric acid (mg/dL) (male)							
Age	Number of	Average	Average	7.1 mg/dL and	8.0 mg/dL and			
	examinees	age	uric acid	above	above			
0-6	•		• • •		•			
7-15	5,584	10.9	4.8	4.7%	1.2%			
16-39	5,966	27.7	6.0	18.5%	6.5%			
40-64	9,562	54.5	5.9	18.1%	6.2%			
65-	7,496	73.4	5.7	14.4%	4.9%			

	Uric acid (mg/dL) (female)								
Age	Number of	Average	Average	7.1 mg/dL and	8.0 mg/dL and				
	examinees	age	age uric acid above above		above				
0-6	•	•	· ·		•				
7-15	5,507	11.0	4.3	0.3%	0.1%				
16-39	8,791	28.3	4.2	0.7%	0.2%				
40-64	14,089	53.7	4.3 1.1%		0.3%				
65-	9,229	73.8	4.5	2.1%	0.6%				

	Uric acid (mg/dL) (overall)								
Age	Number of	Average	Average	7.1 mg/dL and	8.0 mg/dL and				
	examinees	age	uric acid	above	above				
0-6	•	· · ·		•					
7-15	7,232	10.9	4.7	3.4%	1.1%				
16-39	8,480	28.6	5.0	8.2%	2.7%				
40-64	19,552	55.0	5.1	9.1%	3.1%				
65-	18,637	73.5	5.1	8.7%	3.2%				

	Uric acid (mg/dL) (male)								
Age	Number of	Average	Average	7.1 mg/dL and	8.0 mg/dL and				
	examinees	age uric acid above		above	above				
0-6	•			•	•				
7-15	3,704	10.9	5.0	6.1%	2.0%				
16-39	3,230	27.9	6.1	20.3%	6.8%				
40-64	7,717	55.4	6.0	20.9%	7.3%				
65-	8,475	73.4	5.8	16.0%	5.9%				

	Uric acid (mg/dL) (female)								
Age	Number of	Average	Average	7.1 mg/dL and	8.0 mg/dL and				
	examinees	age	uric acid	above	above				
0-6		•	• • •						
7-15	3,528	11.0	4.4	0.6%	0.2%				
16-39	5,250	29.1	4.3	0.7%	0.2%				
40-64	11,835	54.6	4.4 1.5%		0.4%				
65-	10,162	73.6	4.6	2.6%	0.8%				

## Uric acid

FY 2013

	Uric acid (mg/dL) (overall)								
Age	Number of	Average	Average	7.1 mg/dL and	8.0 mg/dL and				
	examinees	age	uric acid	above	above				
0-6	•	•	•	•	•				
7-15	6,290	10.9	4.5	2.6%	0.7%				
16-39	6,536	29.0	5.0	8.9%	3.2%				
40-64	16,921	55.3	5.1 8.4%		2.7%				
65-	18,957	73.5	5.2	9.0%	2.9%				

	Uric acid (mg/dL) (male)								
Age	Number of	Average	Average	7.1 mg/dL and	8.0 mg/dL and				
	examinees	age	uric acid	above	above				
0-6	•	•	· · ·						
7-15	3,218	10.9	4.8	4.9%	1.5%				
16-39	2,480	28.3	6.1	21.8%	8.0%				
40-64	6,510	55.7	6.0 19.7%		6.4%				
65-	8,637	73.4	3.4 5.8 16.3%		5.2%				

	Uric acid (mg/dL) (female)								
Age	Number of	Average	Average	7.1 mg/dL and	8.0 mg/dL and				
	examinees	age uric acid above abov		above					
0-6	•		•	•	•				
7-15	3,072	10.9	4.2	0.2%	-				
16-39	4,056	29.5	4.3	1.0%	0.3%				
40-64	10,411	55.0	4.5	1.4%	0.4%				
65-	10,320	73.5	4.7	3.0%	0.9%				

The prevalence of individuals with a uric acid level of 7.1 mg/dL and above in FY 2011 was: 2.5 % (4.7% for males and 0.3% for females) for age group 7-15; 7.9% (18.5% for males and 0.7% for females) for age group 16-39; 8.0% (18.1% for males and 1.1% for females) for age group 40-64; and 7.6% (14.4% for males and 2.1% for females) for age group 65 and above. On the other hand, the prevalence of individuals with a uric acid level of 7.1 mg/dL and above in FY 2013 for age groups 7-15, 16-39, 40-64, and 65 and above were respectively 2.6%, 8.9%, 8.4%, and 9.0%. The prevalence increased in all age groups.

# RBC

	RBC ( $10^6/\mu$ L) (overall)								
Age		Number of	Average age	Average					
		examinees		RBC					
	0-6	6,428	3.6	4.70					
	7-15	11,474	11.0	4.80					
	16-39	14,757	28.1	4.84					
	40-64	23,649	54.0	4.71					
	65-	16,723	73.7	4.56					

	RBC ( $10^6/\mu$ L) (male)								
Age	Number of	Average	Average	3.69x10 <sup>6</sup> /µL	3.99x10 <sup>6</sup> /µL	$5.80 x 10^{6} / \mu L$			
	examinees	age	RBC	and below	and below	and above			
0-6	3,253	3.6	4.72	0.0%	0.6%	0.2%			
7-15	5,764	10.9	4.91	0.0%	0.3%	1.1%			
16-39	5,966	27.7	5.21	0.0%	0.1%	4.4%			
40-64	9,562	54.5	4.96	0.4%	1.3%	1.6%			
65-	7,495	73.4	4.74	1.5%	5.3%	1.1%			

RBC ( $10^6/\mu$ L) (female)								
Age	Number of	Average	Average	3.39x10 <sup>6</sup> /µL	3.69x10 <sup>6</sup> /µL	$5.50 x 10^{6} / \mu L$		
	examinees	age	RBC	and below	and below	and above		
0-6	3,175	3.6	4.68	0.1%	0.1%	0.8%		
7-15	5,710	11.0	4.69	0.0%	0.1%	0.8%		
16-39	8,791	28.3	4.58	0.0%	0.7%	0.5%		
40-64	14,087	53.7	4.54	0.2%	0.8%	0.4%		
65-	9.228	73.8	4.42	0.8%	3.3%	0.4%		

FY 2	012
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RBC ( $10^6/\mu$ L) (overall)								
Age	Age Number of		Average age	Average				
		examinees		RBC				
	0-6	4,342	3.6	4.69				
	7-15	7,435	10.9	4.80				
	16-39	8,479	28.6	4.75				
	40-64	19,552	55.0	4.61				
	65-	18,636	73.5	4.45				

RBC ( $10^6/\mu$ L) (male)							
Age	Number of	Average	Average	3.69x10 <sup>6</sup> /µL	3.99x10 <sup>6</sup> /µL	5.80x10 <sup>6</sup> /µL	
	examinees	age	RBC	and below	and below	and above	
0-6	2,166	3.6	4.72	-	0.9%	0.4%	
7-15	3,809	10.8	4.90	0.0%	0.3%	0.7%	
16-39	3,230	27.9	5.17	-	0.1%	3.5%	
40-64	7,717	55.4	4.88	0.7%	2.0%	1.6%	
65-	8,476	73.4	4.63	2.9%	8.5%	0.9%	

RBC ( $10^6/\mu$ L) (female)								
Age	Number of	Average	Average	3.39x10 <sup>6</sup> /µL	3.69x10 <sup>6</sup> /µL	$5.50 \mathrm{x10^{6}/\mu L}$		
	examinees	age	RBC	and below	and below	and above		
0-6	2,176	3.6	4.67	-	-	0.9%		
7-15	3,626	10.9	4.70	-	0.1%	0.6%		
16-39	5,249	29.1	4.49	0.2%	1.0%	0.4%		
40-64	11,835	54.6	4.44	0.3%	1.5%	0.4%		
65-	10,160	73.6	4.30	1.5%	6.7%	0.2%		

# RBC

RBC ( $10^6/\mu$ L) (overall)								
Age	Age Number		Average age	Average				
		examinees		RBC				
	0-6	3,781	3.7	4.70				
	7-15	6,421	10.8	4.81				
	16-39	6,536	29.0	4.75				
	40-64	16,920	55.3	4.62				
	65-	18,955	73.5	4.46				

RBC ( $10^6/\mu$ L) (male)								
Age	Number of	Average	Average	3.69x10 <sup>6</sup> /µL	3.99x10 <sup>6</sup> /µL	5.80x10 <sup>6</sup> /µL		
	examinees	age	RBC	and below	and below	and above		
0-6	1,942	3.7	4.73	0.1%	0.5%	0.3%		
7-15	3,287	10.9	4.91	-	0.1%	0.9%		
16-39	2,480	28.3	5.16	-	0.2%	3.7%		
40-64	6,510	55.7	4.89	0.7%	2.0%	1.8%		
65-	8,637	73.4	4.64	2.7%	8.5%	0.8%		

RBC ( $10^6/\mu$ L) (female)								
Age	Number of	Average	Average	3.39x10 <sup>6</sup> /µL	3.69x10 <sup>6</sup> /µL	$5.50 \mathrm{x10^{6}/\mu L}$		
	examinees	age	RBC	and below	and below	and above		
0-6	1,839	3.7	4.68	0.1%	0.1%	0.8%		
7-15	3,134	10.8	4.70	-	0.1%	0.6%		
16-39	4,056	29.5	4.50	0.3%	1.1%	0.6%		
40-64	10,410	55.0	4.45	0.3%	1.7%	0.3%		
65-	10,318	73.5	4.31	1.6%	6.2%	0.3%		

The prevalence by age group with an RBC of  $3.69 \times 10^6/\mu$ L and above among males for FY 2011 was: 0.0% for age group 0-6; 0.0% for age group 7-15; 0.0% for age group 16-39; 0.4% for age group 40-64; and 1.5% for age group 65 and above. For FY 2012 the prevalence was: not applicable for age group 0-6; 0.0% for age group 7-15; not applicable for age group 16-39; 0.7% for age group 40-64; and 2.9% for age group 65 and above. For FY 2013 the prevalence was: 0.1% for age group 0-6; not applicable for age group 7-15; not applicable for age group 16-39; 0.7% for age group 0-6; not applicable for age group 7-15; not applicable for age group 16-39; 0.7% for age group 0-6; not applicable for age group 7-15; not applicable for age group 16-39; 0.7% for age group 40-64; and 2.7% for age group 65 and above.

The prevalence by age group with an RBC of  $3.39 \times 10^6/\mu$ L and above among females in FY 2011 was: 0.1% for age group 0-6; 0.0% for age group 7-15; 0.0% for age group 16-39; 0.2% for age group 40-64; 0.8% for age group 65 and above. For FY 2012 the prevalence was: not applicable for age group 0-6; not applicable for age group 7-15; 0.2% for age group 16-39; 0.3% for age group 40-64; and 1.5% for age group 65 and above. For FY 2013 the prevalence was: 0.1% for age group 0-6; not applicable for age group 7-15; 0.3% for age group 16-39; 0.3% for age group 40-64; and 1.6% for age group 65 and above.

There were no significant differences in the average values of each age group through FY 2011-2013, but there was a high prevalence of polycythemia among 16-39 year old males.

# Hemoglobin

Hemoglobin (g/dL) (overall)							
Age		Number of	Average age	Average			
		examinees		hemoglobin			
	0-6	6,428	3.6	12.6			
	7-15	11,475	11.0	13.6			
	16-39	14,757	28.1	14.3			
	40-64	23,649	54.0	14.3			
	65-	16,723	73.7	14.1			

Hemoglobin (g/dL ) (male)								
Age	Number of	Average	Average	12.0 g/dL	13.0 g/dL	18.0 g/dL		
	examinees	age	hemoglobin	and below	and below	and above		
0-6	3,253	3.6	12.5	24.5%	74.2%	-		
7-15	5,765	10.9	13.8	3.8%	24.8%	0.0%		
16-39	5,966	27.7	15.9	0.3%	0.6%	1.7%		
40-64	9,562	54.5	15.5	0.8%	2.4%	1.5%		
65-	7,495	73.4	14.9	3.1%	8.8%	1.4%		

Hemoglobin (g/dL) (female)								
Age	Number of	Average	Average	11.0 g/dL	12.0 g/dL	16.0 g/dL		
	examinees	age	hemoglobin	and below	and below	and above		
0-6	3,175	3.6	12.6	3.1%	23.8%	-		
7-15	5,710	11.0	13.3	1.6%	7.6%	0.1%		
16-39	8,791	28.3	13.3	5.7%	13.2%	0.4%		
40-64	14,087	53.7	13.4	5.6%	11.4%	1.0%		
65-	9,228	73.8	13.5	2.7%	10.5%	1.0%		

Hemoglobin (g/dL) (overall)							
Age		Number of	Average age	Average			
		examinees		hemoglobin			
	0-6	4,342	3.6	12.6			
7	7-15	7,435	10.9	13.6			
16	5-39	8,479	28.6	14.1			
40	)-64	19,552	55.0	14.0			
	65-	18,636	73.5	13.8			

	Hemoglobin (g/dL ) (male)								
Age	Number of	Average	Average	12.0 g/dL	13.0 g/dL	18.0 g/dL			
	examinees	age	hemoglobin	and below	and below	and above			
0-6	2,166	3.6	12.6	25.3%	71.4%	-			
7-15	3,809	10.8	13.8	3.2%	21.9%	-			
16-39	3,230	27.9	15.7	0.2%	0.5%	1.0%			
40-64	7,717	55.4	15.2	0.9%	3.5%	1.2%			
65-	8,476	73.4	14.6	4.0%	12.8%	0.8%			

	Hemoglobin (g/dL) (female)								
Age	Number of	Average	Average	11.0 g/dL	12.0 g/dL	16.0 g/dL			
	examinees	age	hemoglobin	and below	and below	and above			
0-6	2,176	3.6	12.6	3.2%	23.1%	0.0%			
7-15	3,626	10.9	13.4	1.0%	6.2%	0.2%			
16-39	5,249	29.1	13.1	6.0%	15.3%	0.4%			
40-64	11,835	54.6	13.2	5.0%	12.5%	0.7%			
65-	10,160	73.6	13.1	3.7%	15.4%	0.4%			

# Hemoglobin

	Hemoglobin (g/dL) (overall)								
Age		Number of	Average age	Average					
		examinees		hemoglobin					
	0-6	3,781	3.7	12.6					
	7-15	6,421	10.8	13.6					
	16-39	6,536	29.0	14.1					
	40-64	16,920	55.3	14.1					
	65-	18,955	73.5	13.9					

	Hemoglobin (g/dL ) (male)								
Age	Number of	Average	Average	12.0 g/dL	13.0 g/dL	18.0 g/dL			
	examinees	age	hemoglobin	and below	and below	and above			
0-6	1,942	3.7	12.6	25.0%	71.7%	-			
7-15	3,287	10.9	13.8	2.5%	23.4%	0.0%			
16-39	2,480	28.3	15.7	0.2%	0.6%	0.9%			
40-64	6,510	55.7	15.3	1.0%	2.8%	1.4%			
65-	8,637	73.4	14.7	3.7%	11.3%	1.1%			

	Hemoglobin (g/dL) (female)								
Age	Number of	Average	Average	11.0 g/dL	12.0 g/dL	16.0 g/dL			
	examinees	age	hemoglobin	and below	and below	and above			
0-6	1,839	3.7	12.6	3.8%	22.0%	-			
7-15	3,134	10.8	13.4	1.1%	5.9%	0.1%			
16-39	4,056	29.5	13.2	4.9%	13.6%	0.4%			
40-64	10,410	55.0	13.3	4.2%	11.0%	0.8%			
65-	10,318	73.5	13.3	3.1%	13.4%	0.6%			

The prevalence based on age groups for males with 12.0 g/dL and above hemoglobin in FY 2011 was: 24.5% for age group 0-6; 3.8% for age group 7-15; 0.3% for age group 16-39; 0.8% for age group 40-64; and 3.1% for age group 65 and above. The prevalence for FY 2012 was: 25.3% for age group 0-6; 3.2% for age group 7-15; 0.2% for age group 16-39; 0.9% for age group 40-64; and 4.0% for age group 65 and above. The prevalence for FY 2013 was: 25.0% for age group 0-6; 2.5% for age group 7-15; 0.2% for age group 16-39; 1.0% for age group 40-64; 3.7% for age group 65 and above.

The prevalence based on age groups for females with 11.0 g/dL and above hemoglobin in FY 2011 was: 3.1% for age group 0-6; 1.6% for age group 7-15; 5.7% for age group 16-39; 5.6% for age group 40-64; and 2.7% for age group 65 and above. The prevalence for FY 2012 was: 3.2% for age group 0-6; 1.0% for age group 7-15; 6.0% for age group 16-39; 5.0% for age group 40-64; 3.7% for age group 65 and above. The prevalence for FY 2013 was: 3.8% for age group 0-6; 1.1% for age group 7-15; 4.9% for age group 16-39; 4.2% for age group 40-64; and 3.1% for age group 65 and above.

Further, there were no significant differences in the average value of each age group throughout FY 2011-2013.

# Hematocrit

Hematocrit (%) (overall)								
Age	Number	of	Average age	Average				
	examinee	S		hematocrit				
0-	6 6	,428	3.6		37.3			
7-1	5 11	,475	11.0	2	40.3			
16-3	9 14	,757	28.1	2	42.9			
40-6	4 23	,649	54.0	2	42.8			
65	- 16	,723	73.7	2	42.4			

Hematocrit (%) (male)									
Age	Number of	Average	Average	<u>&lt;</u> 35.9%	<u>&lt;</u> 37.9%	<u>≥</u> 55.0%			
	examinees	age	hematocrit						
0-6	3,253	3.6	37.2	28.4%	64.4%	-			
7-15	5,765	10.9	40.9	5.2%	19.0%	-			
16-39	5,966	27.7	46.7	0.2%	0.3%	0.1%			
40-64	9,562	54.5	45.8	0.6%	1.3%	0.2%			
65-	7,495	73.4	44.3	2.2%	4.8%	0.3%			

	Hematocrit (%) (female)								
Age	Number of	Average	Average	<u>&lt;</u> 28.9%	<u>&lt;</u> 32.9%	<u>&gt;</u> 48.0%			
	examinees	age	hematocrit						
0-6	3,175	3.6	37.4	0.2%	2.1%	-			
7-15	5,710	11.0	39.8	0.2%	0.9%	0.1%			
16-39	8,791	28.3	40.3	0.4%	2.3%	0.2%			
40-64	14,087	53.7	40.7	0.6%	2.9%	0.6%			
65-	9,228	73.8	40.8	0.2%	1.2%	0.9%			

FY	2012
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Hematocrit (%) (overall)									
Age	Number of	Average age	Average						
	examinees		hematocrit						
0-	6 4,342	3.6	37.7						
7-1	5 7,435	10.9	40.8						
16-3	9 8,480	28.6	42.7						
40-6	4 19,552	55.0	42.7						
65	- 18,636	73.5	42.2						

	Hematocrit (%) (male)								
Age	Number of	Average	Average	<u>&lt;</u> 35.9%	<u>&lt;</u> 37.9%	<u>≥</u> 55.0%			
	examinees	age	hematocrit						
0-6	2,166	3.6	37.6	24.1%	56.6%	-			
7-15	3,809	10.8	41.3	2.8%	12.9%	-			
16-39	3,230	27.9	46.8	0.1%	0.2%	0.2%			
40-64	7,717	55.4	45.8	0.6%	1.3%	0.4%			
65-	8,476	73.4	44.2	2.6%	6.1%	0.4%			

	Hematocrit (%) (female)								
Age	Number of	Average	Average	<u>&lt;</u> 28.9%	<u>&lt;</u> 32.9%	<u>&gt;</u> 48.0%			
	examinees	age	hematocrit						
0-6	2,176	3.6	37.9	0.1%	1.4%	0.0%			
7-15	3,626	10.9	40.4	0.0%	0.4%	0.2%			
16-39	5,250	29.1	40.2	0.3%	2.2%	0.4%			
40-64	11,835	54.6	40.7	0.4%	2.2%	1.0%			
65-	10,160	73.6	40.5	0.3%	1.7%	0.9%			

### Hematocrit

FY 2013

Hematocrit (%) (overall)									
Age	Number of	Average age	Average						
	examinees		hematocrit						
0-6	3,781	3.7	37.3						
7-15	6,421	10.8	40.3						
16-39	6,536	29.0	42.4						
40-64	16,920	55.3	42.3						
65-	18,955	73.5	41.8						

	Hematocrit (%) (male)										
Age	Number of	Average	Average	<u>&lt;</u> 35.9%	<u>&lt;</u> 37.9%	<u>≥</u> 55.0%					
	examinees	age	hematocrit								
0-6	1,942	3.7	37.2	29.0%	62.5%	-					
7-15	3,287	10.9	40.8	4.5%	18.2%	-					
16-39	2,480	28.3	46.3	0.2%	0.4%	0.1%					
40-64	6,510	55.7	45.4	0.7%	1.6%	0.3%					
65-	8,637	73.4	43.7	3.2%	7.1%	0.3%					

	Hematocrit (%) (female)										
Age	Number of	Average	Average	<u>&lt;</u> 28.9%	<u>&lt;</u> 32.9%	<u>&gt;</u> 48.0%					
	examinees	age	hematocrit								
0-6	1,839	3.7	37.5	0.1%	2.9%	-					
7-15	3,134	10.8	39.8	0.1%	0.7%	0.1%					
16-39	4,056	29.5	40.0	0.4%	2.3%	0.3%					
40-64	10,410	55.0	40.4	0.5%	2.3%	0.7%					
65-	10,318	73.5	40.2	0.2%	2.0%	0.8%					

The prevalence based on age groups for males with 35.9% and below hematocrit in FY 2011 was: 28.4% for age group 0-6; 5.2% for age group 7-15; 0.2% for age group 16-39; 0.6% for age group 40-64; and 2.2% for age group 65 and above. The prevalence for FY 2012 was 24.1% for age group 0-6; 2.8% for age group 7-15; 0.1% for age group 16-39; 0.6% for age group 40-64; 2.6% for age group 65 and above. For FY 2013 the prevalence was: 29.0% for age group 0-6; 4.5% for age group 7-15; 0.2% for age group 16-39; 0.7% for age group 40-64; and 3.2% for age group 65 and above.

The prevalence based on age groups for females with 28.9% and above hematocrit in FY 2011

was: 0.2% for age group 0-6; 0.2% for age group 7-15; 0.4% for age group 16-39; 0.6% for age group 40-64; 0.2% for age group 65 and above. For FY 2012 the prevalence was: 0.1% for age group 0-6; 0.0% for age group 7-15; 0.3% for age group 16-39; 0.4% for age group 40-64; and 0.3% for age group 65 and above. For FY 2013 the prevalence was: 0.1% for age group 0-6; 0.1% for age group 7-15; 0.4% for age group 16-39; 0.5% for age group 40-64; and 0.2% for age group 65 and above.

Further there was no significant change in the average value of each age group throughout FY 2011-2013.

# Platelet count

	Platelet count ( $10^3/\mu$ L) (overall)										
Age	Number of	Average	Average	89x10 <sup>3</sup> /µL	$129 x 10^{3} / \mu L$	370x10 <sup>3</sup> /µL	$450 \mathrm{x} 10^3 / \mu \mathrm{L}$				
	examinees	age	platelet	and below	and below	and above	and above				
			count								
0-6	6,423	3.6	321.9	0.2%	0.5%	22.5%	6.1%				
7-15	11,471	11.0	275.4	0.0%	0.2%	6.4%	0.9%				
16-39	14,703	28.1	263.9	0.0%	0.2%	4.5%	0.6%				
40-64	23,479	54.0	254.2	0.2%	0.8%	3.7%	0.6%				
65-	16,535	73.7	230.9	0.3%	1.9%	1.7%	0.3%				

	Platelet count $(10^3/\mu L)$ (male)										
Age	Number of	Average	Average	89x10³/μL	129x10 <sup>3</sup> /µL	$370 x 10^{3} / \mu L$	450x10 <sup>3</sup> /μL				
	examinees	age	platelet	and below	and below	and above	and above				
			count								
0-6	3,251	3.6	321.2	0.3%	0.5%	22.3%	6.4%				
7-15	5,763	10.9	277.4	-	0.1%	7.2%	1.0%				
16-39	5,951	27.7	252.7	0.0%	0.2%	2.4%	0.2%				
40-64	9,495	54.5	242.4	0.3%	1.2%	2.1%	0.3%				
65-	7,412	73.4	220.7	0.2%	2.7%	1.4%	0.4%				

	Platelet count ( $10^3/\mu$ L) (female)										
Age	Number of	Average	Average	89x10³/μL	129x10 <sup>3</sup> /µL	370x10 <sup>3</sup> /µL	450x10 <sup>3</sup> /µL				
	examinees	age	platelet	and below	and below	and above	and above				
			count								
0-6	3,172	3.6	322.5	0.2%	0.4%	22.7%	5.7%				
7-15	5,708	11.0	273.5	0.1%	0.3%	5.6%	0.8%				
16-39	8,752	28.3	271.6	0.0%	0.2%	5.9%	1.0%				
40-64	13,984	53.7	262.2	0.2%	0.6%	4.9%	0.9%				
65-	9,123	73.8	239.2	0.3%	1.2%	2.0%	0.3%				

	Platelet count ( $10^3/\mu$ L) (overall)										
Age	Number of	Average	Average	89x10³/μL	129x10 <sup>3</sup> /µL	$370 x 10^{3} / \mu L$	$450 \mathrm{x} 10^3 / \mu \mathrm{L}$				
	examinees	age	platelet	and below	and below	and above	and above				
			count								
0-6	4,336	3.6	323.3	0.2%	0.4%	23.4%	6.3%				
7-15	7,431	10.9	275.0	0.0%	0.2%	5.9%	0.6%				
16-39	8,467	28.6	257.0	0.1%	0.3%	3.2%	0.5%				
40-64	19,485	55.0	244.9	0.3%	1.0%	2.7%	0.4%				
65-	18,563	73.5	221.6	0.4%	2.7%	1.2%	0.3%				

	Platelet count $(10^3/\mu L)$ (male)											
Age	Number	Average	Average	89x10³/μL	$129 x 10^{3} / \mu L$	$370 x 10^{3} / \mu L$	$450 \mathrm{x} 10^3 / \mu \mathrm{L}$					
	of	age	platelet	and below	and below	and above	and above					
	examinees		count									
0-6	2,164	3.6	321.1	0.0%	0.3%	22.8%	6.0%					
7-15	3,807	10.8	276.3	-	0.3%	6.1%	0.6%					
16-39	3,225	27.8	249.4	-	0.3%	1.6%	0.1%					
40-64	7,691	55.4	237.3	0.4%	1.4%	2.0%	0.3%					
65-	8,439	73.4	213.8	0.4%	3.5%	0.9%	0.3%					

	Platelet count ( $10^3/\mu$ L) (female)										
Age	Number	Average	Average	89x10³/μL	$129 x 10^{3} / \mu L$	370x10 <sup>3</sup> /µL	$450 \mathrm{x} 10^3 / \mu \mathrm{L}$				
	of	age	platelet	and below	and below	and above	and above				
	examinees		count								
0-6	2,172	3.6	325.4	0.3%	0.6%	24.0%	6.7%				
7-15	3,624	10.9	273.6	0.0%	0.1%	5.7%	0.5%				
16-39	5,242	29.1	261.7	0.1%	0.4%	4.2%	0.7%				
40-64	11,794	54.6	249.9	0.2%	0.8%	3.1%	0.4%				
65-	10,124	73.6	228.2	0.4%	2.1%	1.5%	0.3%				

# Platelet count

	Platelet count $(10^3/\mu L)$ (overall)										
Age	Number	Average	Average	89x10³/μL	$129 x 10^{3} / \mu L$	$370 x 10^{3} / \mu L$	$450 \mathrm{x} 10^3 / \mu \mathrm{L}$				
	of	age	platelet	and below	and below	and above	and above				
	examinees		count								
0-6	3,778	3.7	324.7	0.0%	0.3%	23.9%	6.2%				
7-15	6,420	10.8	279.5	0.0%	0.1%	6.3%	0.8%				
16-39	6,528	29.0	262.6	0.1%	0.4%	4.1%	0.5%				
40-64	16,872	55.3	249.7	0.2%	0.9%	3.3%	0.6%				
65-	18,878	73.5	225.1	0.4%	2.2%	1.3%	0.3%				

#### FY 2013

	Platelet count $(10^3/\mu L)$ (male)										
Age	Number	Average	Average	89x10 <sup>3</sup> /µL	129x10 <sup>3</sup> /µL	$370 x 10^{3} / \mu L$	$450 \mathrm{x} 10^3 / \mu \mathrm{L}$				
	of	age	platelet	and below	and below	and above	and above				
	examinees		count								
0-6	1,941	3.7	324.4	-	0.4%	24.3%	6.6%				
7-15	3,287	10.9	280.5	-	0.1%	7.0%	0.9%				
16-39	2,479	28.3	254.5	0.0%	0.4%	2.7%	0.2%				
40-64	6,494	55.7	242.8	0.3%	1.2%	2.5%	0.3%				
65-	8,603	73.4	217.5	0.4%	3.0%	1.1%	0.3%				

	Platelet count ( $10^3/\mu$ L) (female)										
Age	Number	Average	Average	89x10³/μL	$129 x 10^{3} / \mu L$	$370 x 10^{3} / \mu L$	450x10 <sup>3</sup> /μL				
	of	age	platelet	and below	and below	and above	and above				
	examinees		count								
0-6	1,837	3.7	325.0	0.1%	0.3%	23.6%	5.8%				
7-15	3,133	10.8	278.5	0.0%	0.1%	5.6%	0.8%				
16-39	4,049	29.5	267.6	0.2%	0.4%	4.9%	0.7%				
40-64	10,378	55.0	253.9	0.2%	0.7%	3.8%	0.7%				
65-	10,275	73.5	231.4	0.3%	1.5%	1.4%	0.3%				

The prevalence of individuals with the platelet count of  $89 \times 10^3/\mu$ L and below was: 0.2% (0.3% for males and 0.2% for females) for age group 0-6; 0.0% (not applicable for males and 0.1% for females) for age group 7-15; 0.0% (0.0% for males and 0.0% for females) for age group

16-39; 0.2% (0.3% for males and 0.2% for females) for age group 40-64; and 0.3% (0.2% for males and 0.3% for females) for age group 65 and above.

Further, there were no significant changes in the average value of all age groups throughout FY 2011-2013.

# WBC

	WBC $(10^3/\mu L)$ (overall)										
Age	Number	Average	Average	2.9x10 <sup>3</sup> /µL	3.9x10 <sup>3</sup> /µL	9.6x10 <sup>3</sup> /µL	11.1x10 <sup>3</sup> /µL				
	of	age	WBC	and below	and below	and above	and above				
	examinees										
0-6	6,429	3.6	8.5	0.1%	0.6%	28.1%	13.0%				
7-15	11,475	11.0	6.5	0.2%	3.7%	5.8%	2.0%				
16-39	14,757	28.1	6.1	0.6%	6.4%	4.1%	1.4%				
40-64	23,649	54.0	5.9	0.8%	8.2%	3.0%	1.0%				
65-	16,723	73.7	5.9	0.6%	6.8%	2.3%	0.7%				

	WBC $(10^{3}/\mu L)$ (male)									
Age	Number Average		Average	2.9x10 <sup>3</sup> /µL 3.9x10 <sup>3</sup> /µL 9.6x10 <sup>3</sup> /		9.6x10 <sup>3</sup> /µL	11.1x10 <sup>3</sup> /µL			
	of age		WBC	and below	and below	and above	and above			
	examinees									
0-6	3,253	3.6	8.5	0.1%	0.7%	28.3%	12.9%			
7-15	5,765	10.9	6.5	0.2%	3.4%	6.0%	2.1%			
16-39	5,966	27.7	6.3	0.3%	4.6%	4.6%	1.6%			
40-64	9,562	54.5	6.4	0.3%	4.0%	5.1%	1.8%			
65-	7,495	73.4	6.2	0.3%	4.8%	3.1%	1.1%			

	WBC $(10^3/\mu L)$ (female)										
Age	Number	Average	Average	$2.9 x 10^{3} / \mu L$	3.9x10 <sup>3</sup> /µL	9.6x10 <sup>3</sup> /µL	11.1x10 <sup>3</sup> /µL				
	of	age	WBC	and below	and below	and above	and above				
	examinees										
0-6	3,176	3.6	8.5	0.1%	0.4%	27.9%	13.0%				
7-15	5,710	11.0	6.5	0.2%	4.0%	5.7%	1.8%				
16-39	8,791	28.3	6.0	0.9%	7.6%	3.8%	1.3%				
40-64	14,087	53.7	5.6	1.1%	11.1%	1.6%	0.5%				
65-	9,228	73.8	5.8	0.9%	8.5%	1.7%	0.5%				

	WBC $(10^3/\mu L)$ (overall)									
Age	Number	Average	Average	2.9x10 <sup>3</sup> /µL	3.9x10 <sup>3</sup> /µL	9.6x10 <sup>3</sup> /µL	11.1x10 <sup>3</sup> /µL			
	of	age	WBC	and below	and below	and above	and above			
	examinees									
0-6	4,342	3.6	8.6	0.1%	0.4%	29.1%	13.4%			
7-15	7,435	10.9	6.5	0.2%	2.6%	6.0%	2.0%			
16-39	8,480	28.6	6.0	0.7%	7.8%	3.6%	1.3%			
40-64	19,551	55.0	5.8	0.9%	9.7%	2.6%	0.8%			
65-	18,637	73.5	5.7	0.8%	8.3%	1.7%	0.5%			

	WBC $(10^3/\mu L)$ (male)									
Age	Number Average		Average	2.9x10 <sup>3</sup> /µL	3.9x10 <sup>3</sup> /µL	9.6x10 <sup>3</sup> /µL	11.1x10 <sup>3</sup> /µL			
	of	age	WBC	and below	and below	and above	and above			
	examinees									
0-6	2,166	3.6	8.6	0.0%	0.3%	29.3%	13.2%			
7-15	3,809	10.8	6.5	0.2%	2.7%	6.5%	2.2%			
16-39	3,230	27.9	6.1	0.4%	5.3%	4.1%	1.6%			
40-64	7,717	55.4	6.2	0.3%	5.1%	4.3%	1.4%			
65-	8,476	73.4	6.0	0.5%	6.1%	2.4%	0.7%			

	WBC $(10^3/\mu L)$ (female)										
Age	Number	Average	Average	2.9x10 <sup>3</sup> /µL	3.9x10 <sup>3</sup> /µL	9.6x10 <sup>3</sup> /µL	11.1x10 <sup>3</sup> /µL				
	of	age	WBC	and below	and below	and above	and above				
	examinees										
0-6	2,176	3.6	8.6	0.1%	0.5%	29.0%	13.5%				
7-15	3,626	10.9	6.5	0.2%	2.5%	5.4%	1.8%				
16-39	5,250	29.1	5.9	0.9%	9.4%	3.4%	1.1%				
40-64	11,834	54.6	5.5	1.3%	12.6%	1.5%	0.4%				
65-	10,161	73.6	5.5	1.0%	10.2%	1.2%	0.4%				

### WBC

	WBC $(10^3/\mu L)$ (overall)										
Age	Number Average		Average	$2.9 x 10^{3} / \mu L$	3.9x10 <sup>3</sup> /µL	9.6x10 <sup>3</sup> /µL	11.1x10 <sup>3</sup> /µL				
	of	age	WBC	and below	and below	and above	and above				
	examinees										
0-6	3,781	3.7	8.6	-	0.3%	30.0%	13.5%				
7-15	6,421	10.8	6.6	0.1%	2.3%	6.6%	2.2%				
16-39	6,536	29.0	6.1	0.4%	7.2%	3.6%	1.4%				
40-64	16,920	55.3	5.8	0.8%	9.0%	2.8%	0.9%				
65-	18,955	73.5	5.8	0.7%	7.6%	2.0%	0.7%				

	WBC $(10^3/\mu L)$ (male)										
Age	Number	Average	Average	$2.9 x 10^{3} / \mu L$	$3.9 x 10^{3} / \mu L$	9.6x10 <sup>3</sup> /µL	11.1x10 <sup>3</sup> /µL				
	of	age	WBC	and below	and below	and above	and above				
	examinees										
0-6	1,942	3.7	8.6	-	0.3%	30.1%	14.2%				
7-15	3,287	10.9	6.6	0.0%	2.6%	7.0%	2.2%				
16-39	2,480	28.3	6.2	0.2%	6.1%	3.5%	1.5%				
40-64	6,510	55.7	6.3	0.3%	4.7%	4.8%	1.6%				
65-	8,637	73.4	6.0	0.4%	5.5%	2.6%	0.9%				

	WBC $(10^3/\mu L)$ (female)										
Age	Number	Average	Average	2.9x10 <sup>3</sup> /µL	3.9x10 <sup>3</sup> /µL	9.6x10 <sup>3</sup> /µL	11.1x10 <sup>3</sup> /µL				
	of	age	WBC	and below	and below	and above	and above				
	examinees										
0-6	1,839	3.7	8.6	-	0.2%	30.0%	12.9%				
7-15	3,134	10.8	6.7	0.2%	2.1%	6.2%	2.3%				
16-39	4,056	29.5	6.0	0.5%	7.9%	3.6%	1.3%				
40-64	10,410	55.0	5.5	1.0%	11.7%	1.5%	0.4%				
65-	10,318	73.5	5.6	1.0%	9.3%	1.4%	0.5%				

The prevalence of WBC  $2.9 \times 10^3 / \mu$ L and below for FY 2011 was: 0.1% (0.1% for males and 0.1% for females) for age group 0-6; 0.2% (0.2% for males and 0.2% for females) for age group 7-15; 0.6% (0.3% for males and 0.9% for females) for age group 16-39; 0.8% (0.3% for males and 1.1% for females) for age group 40-64; 0.6% (0.3% for males and 0.9% for females) for age group 65 and above.

Further, there were no significant changes in average WBC among all age groups throughout FY 2011-2013.

# Differential white blood count (neutrophil)

	Neutrophil (count/µL) (overall)										
Age	Number of	Average	Average	Minimum	Maximum	500/µL					
	examinees	age	neutrophil	value	value	and below					
0-6	6,418	3.6	3,666	198	16,770	0.0%					
7-15	11,470	11.0	3,373	324	13,876	0.0%					
16-39	14,746	28.1	3,465	531	17,313	-					
40-64	23,643	54.0	3,250	266	19,388	0.0%					
65-	16,719	73.7	3,275	336	17,553	0.0%					

Neutrophil (count/µL) (male)								
Age	Number of	Average	Average	Minimum	Maximum	500/µL		
	examinees	age	neutrophil	value	value	and below		
0-6	3,247	3.6	3,683	558	15,566	-		
7-15	5,762	10.9	3,321	324	12,901	0.0%		
16-39	5,962	27.7	3,428	531	14,977	-		
40-64	9,559	54.5	3,494	379	15,222	0.0%		
65-	7,495	73.4	3,423	336	17,553	0.0%		

Neutrophil (count/µL) (female)								
Age	Number of	Average	Average	Minimum	Maximum	500/µL		
	examinees	age	neutrophil	value	value	and below		
0-6	3,171	3.6	3,649	198	16,770	0.1%		
7-15	5,708	11.0	3,425	336	13,876	0.0%		
16-39	8,784	28.3	3,490	581	17,313	-		
40-64	14,084	53.7	3,085	266	19,388	0.0%		
65-	9,224	73.8	3,156	474	15,709	0.0%		

Neutrophil (count/µL) (overall)								
Age	Number of	Average	Average	Minimum	Maximum	500/µL		
	examinees	age	neutrophil	value	value	and below		
0-6	4,320	3.6	3,538	204	23,763	0.1%		
7-15	7,429	10.9	3,299	664	17,052	-		
16-39	8,455	28.6	3,437	637	28,578	-		
40-64	19,473	55.0	3,213	554	20,720	-		
65-	18,547	73.5	3,204	451	18,990	0.0%		

	Neutrophil (count/µL) (male)								
Age	Number of	Average	Average	Minimum	Maximum	500/µL			
	examinees	age	neutrophil	value	value	and below			
0-6	2,158	3.6	3,555	204	14,164	0.1%			
7-15	3,806	10.8	3,259	822	17,052	-			
16-39	3,219	27.9	3,397	805	12,797	-			
40-64	7,687	55.4	3,467	736	20,720	-			
65-	8,435	73.4	3,360	600	17,108	-			

Neutrophil (count/µL) (female)								
Age	Number of	Average	Average	Minimum	Maximum	500/µL		
	examinees	age	neutrophil	value	value	and below		
0-6	2,162	3.6	3,521	315	23,763	0.0%		
7-15	3,623	10.9	3,341	664	16,674	-		
16-39	5,236	29.1	3,461	637	28,578	-		
40-64	11,786	54.7	3,048	554	13,617	-		
65-	10,112	73.6	3,074	451	18,990	0.0%		

### Differential white blood count (neutrophil)

	Neutrophil (count/µL) (overall)								
Age	Number of	Average	Average	Minimum	Maximum	500/µL			
	examinees	age	neutrophil	value	value	and below			
0-6	3,777	3.7	3,476	525	14,067	-			
7-15	6,417	10.8	3,341	315	15,498	0.0%			
16-39	6,526	29.0	3,482	702	16,789	-			
40-64	16,906	55.3	3,247	268	16,044	0.0%			
65-	18,949	73.5	3,270	442	25,690	0.0%			

	Neutrophil (count/µL) (male)									
Age	Number of	Average	Average	Minimum	Maximum	500/µL				
	examinees	age	neutrophil	value	value	and below				
0-6	1,941	3.7	3,472	525	14,067	-				
7-15	3,284	10.9	3,255	315	11,914	0.0%				
16-39	2,476	28.3	3,421	736	16,789	-				
40-64	6,505	55.7	3,499	603	14,328	-				
65-	8,633	73.4	3,428	528	21,549	-				

Neutrophil (count/µL) (female)								
Age	Number of	Average	Average	Minimum	Maximum	500/µL		
	examinees	age	neutrophil	value	value	and below		
0-6	1,836	3.7	3,480	526	12,243	-		
7-15	3,133	10.8	3,431	761	15,498	-		
16-39	4,050	29.5	3,520	702	13,513	-		
40-64	10,401	55.0	3,089	268	16,044	0.0%		
65-	10,316	73.5	3,138	442	25,690	0.0%		

Average absolute neutrophil counts derived from the differential white cell counts in FY 2011 were:  $3,666/\mu$ L ( $3,683/\mu$ L for males and  $3,649/\mu$ L for females) for age group 0-6;  $3,373/\mu$ L ( $3,321/\mu$ L for males and  $3,425/\mu$ L for females) for age group 7-15;  $3,465/\mu$ L ( $3,428/\mu$ L for males and  $3,490/\mu$ L for females) for age group 16-39;  $3,250/\mu$ L ( $3,494/\mu$ L for males and  $3,085/\mu$ L for females) for age group 40-64;  $3,275/\mu$ L ( $3,423/\mu$ L for males and  $3,156/\mu$ L for females) for age group 65 and above.

There were no significant differences in the average value of each age group throughout FY 2011-2013.

# Differential white blood count (lymphocyte)

Lymphocyte (count/µL) (overall)								
Age	Number of	Average	Average	Minimum	Maximum	500/µL		
	examinees	age	lymphocyte	value	value	and below		
			count					
0-6	6,418	3.6	4,134	500	14,687	0.0%		
7-15	11,470	11.0	2,524	210	6,890	0.1%		
16-39	14,746	28.1	2,105	351	6,247	0.0%		
40-64	23,643	54.0	2,125	350	35,322	0.0%		
65-	16,719	73.7	2,153	377	14,380	0.0%		

Lymphocyte (count/µL) (male)								
Age	Number of	Average	Average	Minimum	Maximum	500/µL		
	examinees	age	lymphocyte	value	value	and below		
			count					
0-6	3,247	3.6	4,055	500	14,687	0.0%		
7-15	5,762	10.9	2,533	210	6,890	0.1%		
16-39	5,962	27.7	2,232	390	6,247	0.0%		
40-64	9,559	54.5	2,278	535	6,598	-		
65-	7,495	73.4	2,172	468	14,380	0.0%		

	Lymphocyte (count/µL) (female)								
Age	Number of	Average	Average	Minimum	Maximum	500/µL			
	examinees	age	lymphocyte	value	value	and below			
			count						
0-6	3,171	3.6	4,214	975	14,091	-			
7-15	5,708	11.0	2,514	322	6,879	0.1%			
16-39	8,784	28.3	2,018	351	5,611	0.0%			
40-64	14,084	53.7	2,021	350	35,322	0.0%			
65-	9,224	73.8	2,137	377	10,009	0.0%			

Lymphocyte (count/µL) (overall)								
Age	Number of	Average	Average	Minimum	Maximum	500/µL		
	examinees	age	lymphocyte	value	value	and below		
			count					
0-6	4,320	3.6	4,261	418	16,188	0.0%		
7-15	7,429	10.9	2,575	199	8,981	0.0%		
16-39	8,455	28.6	2,002	536	6,354	-		
40-64	19,473	55.0	2,023	367	13,909	0.0%		
65-	18,547	73.5	2,003	332	41,569	0.0%		

Lymphocyte (count/µL) (male)								
Age	Number of	Average	Average	Minimum	Maximum	500/µL		
	examinees	age	lymphocyte	value	value	and below		
			count					
0-6	2,158	3.6	4,202	865	14,211	-		
7-15	3,806	10.8	2,582	199	8,981	0.0%		
16-39	3,219	27.9	2,136	723	6,354	-		
40-64	7,687	55.4	2,138	367	5,568	0.0%		
65-	8,435	73.4	2,013	396	11,115	0.0%		

Lymphocyte (count/µL) (female)								
Age	Number of	Average	Average	Minimum	Maximum	500/µL		
	examinees	age	lymphocyte	value	value	and below		
			count					
0-6	2,162	3.6	4,321	418	16,188	0.0%		
7-15	3,623	10.9	2,569	418	8,526	0.0%		
16-39	5,236	29.1	1,920	536	5,628	-		
40-64	11,786	54.7	1,949	396	13,909	0.1%		
65-	10,112	73.6	1,994	332	41,569	0.0%		

# Differential white blood count (lymphocyte)

#### FY 2013

Lymphocyte (count/µL) (overall)								
Age	Number of	Average	Average	Minimum	Maximum	500/µL		
	examinees	age	lymphocyte	value	value	and below		
			count					
0-6	3,777	3.7	4,330	945	15,912	-		
7-15	6,417	10.8	2,633	687	7,425	-		
16-39	6,526	29.0	2,020	371	5,396	0.0%		
40-64	16,906	55.3	2,042	210	7,391	0.0%		
65-	18,949	73.5	2,017	124	12,381	0.0%		

Lymphocyte (count/µL) (male)								
Age	Number of	Average	Average	Minimum	Maximum	500/µL		
	examinees	age	lymphocyte	value	value	and below		
			count					
0-6	1,941	3.7	4,304	954	15,912	-		
7-15	3,284	10.9	2,633	696	6,210	-		
16-39	2,476	28.3	2,122	371	5,375	0.1%		
40-64	6,505	55.7	2,156	524	7,391	-		
65-	8,633	73.4	2,029	124	12,381	0.0%		

Lymphocyte (count/µL) (female)								
Age	Number of	Average	Average	Minimum	Maximum	500/µL		
	examinees	age	lymphocyte	value	value	and below		
			count					
0-6	1,836	3.7	4,357	945	13,244	-		
7-15	3,133	10.8	2,634	687	7,425	-		
16-39	4,050	29.5	1,958	452	5,396	0.0%		
40-64	10,401	55.0	1,971	210	6,469	0.0%		
65-	10,316	73.5	2,006	360	6,930	0.0%		

Average absolute lymphocyte counts derived from the differential white cell counts in FY 2011 were:  $4,134/\mu$ L ( $4,055/\mu$ L for males and  $4,214/\mu$ L for females) for age group 0-6;  $2,524/\mu$ L ( $2,533/\mu$ L for males and  $2,514/\mu$ L for females) for age group 7-15;  $2,105/\mu$ L ( $2,232/\mu$ L for males and  $2,018/\mu$ L for females) for age group 16-39;  $2,125/\mu$ L ( $2,278/\mu$ L for males and  $2,021/\mu$ L for females) for age group 40-64; and  $2,153/\mu$ L ( $2,172/\mu$ L for males and  $2,137/\mu$ L for females) for age group 65 and above.

There was no significant change in the average value among age groups throughout FY 2011-2013. Further, there was no increase in the prevalence of  $500/\mu$ L and below.

# Differential white blood count (monocyte)

FY 2011

Monocyte (count/µL) (overall)									
Age	Number of	Average	Average	Minimum value	Maximum value				
	examinees	age	monocyte						
			count						
0-6	6,418	3.6	440	0	1,936				
7-15	11,470	11.0	355	0	1,380				
16-39	14,746	28.1	338	0	1,150				
40-64	23,643	54.0	319	0	1,558				
65-	16,719	73.7	330	0	1,369				

Monocyte (count/µL) (male)								
Age	Number of	Average	Average	Minimum value	Maximum value			
	examinees	age	monocyte					
			count					
0-6	3,247	3.6	454	0	1,683			
7-15	5,762	10.9	366	0	1,380			
16-39	5,962	27.7	361	0	1,150			
40-64	9,559	54.5	363	0	1,558			
65-	7,495	73.4	366	19	1,369			

Monocyte (count/µL) (female)								
Age	Number of	Average	Average	Minimum value	Maximum value			
	examinees	age	monocyte					
			count					
0-6	3,171	3.6	426	0	1,936			
7-15	5,708	11.0	343	0	1,242			
16-39	8,784	28.3	322	0	1,120			
40-64	14,084	53.7	289	26	986			
65-	9,224	73.8	301	0	1,293			

## FY 2012

Monocyte (count/µL) (overall)								
Age	Number of	Average	Average	Minimum value	Maximum value			
	examinees	age	monocyte					
			count					
0-6	4,320	3.6	445	0	2,580			
7-15	7,429	10.9	350	0	1,455			
16-39	8,455	28.6	329	0	1,017			
40-64	19,473	55.0	317	0	1,729			
65-	18,547	73.5	332	38	3,913			

Monocyte (count/µL) (male)								
Age	Number of	Average	Average	Minimum value	Maximum value			
	examinees	age	monocyte					
			count					
0-6	2,158	3.6	460	0	2,580			
7-15	3,806	10.8	362	39	1,455			
16-39	3,219	27.9	353	43	1,017			
40-64	7,687	55.4	362	0	1,161			
65-	8,435	73.4	368	44	3,913			

Monocyte (count/µL) (female)								
Age	Number of	Average	Average	Minimum value	Maximum value			
	examinees	age	monocyte					
			count					
0-6	2,162	3.6	431	30	1,708			
7-15	3,623	10.9	337	0	1,372			
16-39	5,236	29.1	314	0	988			
40-64	11,786	54.7	289	29	1,729			
65-	10,112	73.6	303	38	3,128			

# Differential white blood count (monocyte)

#### FY 2013

Monocyte (count/µL) (overall)								
Age	Number of	Average	Average	Minimum value	Maximum value			
	examinees	age	monocyte					
			count					
0-6	3,777	3.7	450	0	1,611			
7-15	6,417	10.8	357	0	1,180			
16-39	6,526	29.0	332	38	1,092			
40-64	16,906	55.3	318	21	1,273			
65-	18,949	73.5	334	58	1,989			

Monocyte (count/µL) (male)								
Age	Number of	Average	Average	Minimum value	Maximum value			
	examinees	age	monocyte					
			count					
0-6	1,941	3.7	465	0	1,462			
7-15	3,284	10.9	365	43	1,174			
16-39	2,476	28.3	356	38	1,092			
40-64	6,505	55.7	362	21	1,273			
65-	8,633	73.4	369	58	1,989			

Monocyte (count/µL) (female)								
Age	Number of	Average	Average	Minimum value	Maximum value			
	examinees	age	monocyte					
			count					
0-6	1,836	3.7	435	0	1,611			
7-15	3,133	10.8	349	0	1,180			
16-39	4,050	29.5	317	42	997			
40-64	10,401	55.0	290	55	1,258			
65-	10,316	73.5	304	79	1,827			

Average absolute monocyte counts derived from the differential white cell counts in FY 2011 were:  $440/\mu$ L ( $454/\mu$ L for males and  $426/\mu$ L for females) for age group 0-6;  $355/\mu$ L ( $366/\mu$ L for males and  $343/\mu$ L for females) for age group 7-15;  $338/\mu$ L ( $361/\mu$ L for males and  $322/\mu$ L for females) for age group 16-39;  $319/\mu$ L ( $363/\mu$ L for males and  $289/\mu$ L for females) for age group 40-64;  $330/\mu$ L ( $366/\mu$ L for males and  $301/\mu$ L for females) for age group 65 and above.

There were no significant differences in the average value of all age groups throughout FY 2011-2013.

# Differential white blood count (eosinophil)

## FY 2011

Eosinophil (count/µL) (overall)							
Age	Number of	Average	Average	Minimum value	Maximum value		
	examinees	age	eosinophil				
			count				
0-6	6,418	3.6	223	0	2,720		
7-15	11,470	11.0	214	0	2,331		
16-39	14,746	28.1	175	0	3,310		
40-64	23,643	54.0	160	0	3,180		
65-	16,719	73.7	153	0	5,852		

	Eosinophil (count/µL) (male)								
Age	Number of	Average	Average	Minimum value	Maximum value				
	examinees	age	eosinophil						
			count						
0-6	3,247	3.6	250	0	1,980				
7-15	5,762	10.9	244	0	2,135				
16-39	5,962	27.7	201	0	3,141				
40-64	9,559	54.5	190	0	3,180				
65-	7,495	73.4	179	0	5,852				

Eosinophil (count/µL) (female)								
Age	Number of	Average	Average	Minimum value	Maximum value			
	examinees	age	eosinophil					
			count					
0-6	3,171	3.6	195	0	2,720			
7-15	5,708	11.0	185	0	2,331			
16-39	8,784	28.3	158	0	3,310			
40-64	14,084	53.7	139	0	2,353			
65-	9,224	73.8	133	0	3,110			

## FY 2012

Eosinophil (count/µL) (overall)							
Age	Number of	Average	Average	Minimum value	Maximum value		
	examinees	age	eosinophil				
			count				
0-6	4,320	3.6	288	0	2,317		
7-15	7,429	10.9	266	0	2,402		
16-39	8,455	28.6	180	0	3,457		
40-64	19,473	55.0	158	0	3,438		
65-	18,547	73.5	150	0	6,024		

Eosinophil (count/µL) (male)							
Age	Number of	Average	Average	Minimum value	Maximum value		
	examinees	age	eosinophil				
			count				
0-6	2,158	3.6	316	0	2,183		
7-15	3,806	10.8	304	0	2,156		
16-39	3,219	27.9	210	0	1,610		
40-64	7,687	55.4	188	0	3,438		
65-	8,435	73.4	174	0	6,024		

Eosinophil (count/µL) (female)							
Age	Number of	Average	Average	Minimum value	Maximum value		
	examinees	age	eosinophil				
			count				
0-6	2,162	3.6	261	0	2,317		
7-15	3,623	10.9	226	0	2,402		
16-39	5,236	29.1	162	0	3,457		
40-64	11,786	54.7	139	0	3,394		
65-	10,112	73.6	131	0	1,808		

Eosinophil (count/µL) (overall)						
Age	Number of	Average	Average	Minimum value	Maximum value	
	examinees	age	eosinophil			
			count			
0-6	3,777	3.7	301	0	2,793	
7-15	6,417	10.8	275	0	3,737	
16-39	6,526	29.0	176	0	4,563	
40-64	16,906	55.3	160	0	4,717	
65-	18,949	73.5	153	0	17,225	

Eosinophil (count/µL) (male)							
Age	Number of	Average	Average	Minimum value	Maximum value		
	examinees	age	eosinophil				
			count				
0-6	1,941	3.7	333	0	2,793		
7-15	3,284	10.9	314	0	3,737		
16-39	2,476	28.3	206	0	4,563		
40-64	6,505	55.7	190	0	4,618		
65-	8,633	73.4	178	0	3,885		

Eosinophil (count/µL) (female)							
Age	Number of	Average	Average	Minimum value	Maximum value		
	examinees	age	eosinophil				
			count				
0-6	1,836	3.7	267	0	2,121		
7-15	3,133	10.8	234	0	1,628		
16-39	4,050	29.5	158	0	1,168		
40-64	10,401	55.0	141	0	4,717		
65-	10,316	73.5	132	0	17,225		

Average absolute eosinophil counts derived from the differential white cell counts in FY 2011 were:  $223/\mu$ L ( $250/\mu$ L for males and  $195/\mu$ L for females) for age group 0-6;  $214/\mu$ L ( $244/\mu$ L for males and  $185/\mu$ L for females) for age group 7-15;  $175/\mu$ L ( $201/\mu$ L for males and  $158/\mu$ L for females) for age group 16-39;  $160/\mu$ L ( $190/\mu$ L for males  $139/\mu$ L for females) for age group 40-64;

 $153/\mu L$  (179/ $\mu L$  for males and 133/ $\mu L$  for female) for age group 65 and above.

There were no significant changes in the average value for all age groups throughout FY 2011-2013.

# Differential white blood count (basophil)

#### FY 2011

Basophil (count/µL) (overall)						
Age	Number of	Average	Average	Minimum value	Maximum value	
	examinees	age	basophil			
			count			
0-6	6,418	3.6	36	0	378	
7-15	11,470	11.0	31	0	703	
16-39	14,746	28.1	30	0	390	
40-64	23,643	54.0	30	0	463	
65-	16,719	73.7	28	0	1,286	

Basophil (count/µL) (male)							
Age	Number of	Average	Average	Minimum value	Maximum value		
	examinees	age	basophil				
			count				
0-6	3,247	3.6	38	0	378		
7-15	5,762	10.9	33	0	703		
16-39	5,962	27.7	31	0	390		
40-64	9,559	54.5	32	0	463		
65-	7,495	73.4	29	0	1,286		

Basophil (count/µL) (female)							
Age	Number of	Average	Average	Minimum value	Maximum value		
	examinees	age	basophil				
			count				
0-6	3,171	3.6	35	0	321		
7-15	5,708	11.0	29	0	338		
16-39	8,784	28.3	28	0	210		
40-64	14,084	53.7	28	0	190		
65-	9,224	73.8	27	0	636		

FY 2012

Basophil (count/µL) (overall)						
Age	Number of	Average	Average	Minimum value	Maximum value	
	examinees	age	basophil			
			count			
0-6	4,320	3.6	39	0	471	
7-15	7,429	10.9	33	0	440	
16-39	8,455	28.6	38	0	306	
40-64	19,473	55.0	40	0	542	
65-	18,547	73.5	38	0	2,021	

Basophil (count/µL) (male)							
Age	Number of	Average	Average	Minimum value	Maximum value		
	examinees	age	basophil				
			count				
0-6	2,158	3.6	40	0	471		
7-15	3,806	10.8	36	0	440		
16-39	3,219	27.9	40	0	273		
40-64	7,687	55.4	43	0	542		
65-	8,435	73.4	41	0	2,021		

Basophil (count/µL) (female)							
Age	Number of	Average	Average	Minimum value	Maximum value		
	examinees	age	basophil				
			count				
0-6	2,162	3.6	37	0	426		
7-15	3,623	10.9	30	0	408		
16-39	5,236	29.1	37	0	306		
40-64	11,786	54.7	37	0	216		
65-	10,112	73.6	36	0	395		

# Differential white blood count (basophil)

#### FY 2013

Basophil (count/µL) (overall)							
Age	Number of	Average	Average	Minimum value	Maximum value		
	examinees	age	basophil				
			count				
0-6	3,777	3.7	38	0	1,120		
7-15	6,417	10.8	34	0	798		
16-39	6,526	29.0	40	0	258		
40-64	16,906	55.3	41	0	345		
65-	18,949	73.5	39	0	683		

Basophil (count/µL) (male)							
Age	Number of	Average	Average	Minimum value	Maximum value		
	examinees	age	basophil				
			count				
0-6	1,941	3.7	40	0	1,120		
7-15	3,284	10.9	35	0	231		
16-39	2,476	28.3	42	0	192		
40-64	6,505	55.7	45	0	345		
65-	8,633	73.4	41	0	590		

Basophil (count/µL) (female)							
Age	Number of	Average	Average	Minimum value	Maximum value		
	examinees	age	basophil				
			count				
0-6	1,836	3.7	36	0	340		
7-15	3,133	10.8	32	0	798		
16-39	4,050	29.5	39	0	258		
40-64	10,401	55.0	39	0	230		
65-	10,316	73.5	37	0	683		

Average absolute basophil counts derived from the differential white cell counts in FY 2011 were:  $36/\mu$ L ( $38/\mu$ L for males and  $35/\mu$ L for females) for age group 0-6;  $31/\mu$ L ( $33/\mu$ L for males and  $29/\mu$ L for females) for age group 7-15;  $30/\mu$ L ( $31/\mu$ L for males and  $28/\mu$ L for females) for age group 16-39;  $30/\mu$ L ( $32/\mu$ L for males and  $28/\mu$ L for females) for age group 16-39;  $30/\mu$ L ( $32/\mu$ L for males and  $28/\mu$ L for females) for age group 65 and above.

There were no significant changes in the average value of all age groups throughout FY 2011-2013.

[Summary of each medical exam items]

- 1) Since FY 2011 there has been an increase in the prevalence of males 70 kg and above and females 65 kg and above among 16 years old and above.
- 2) Overweight individuals with BMI 25 kg/m<sup>2</sup> and above were already 22.3% for age group 16-39. This prevalence increased with age and was 37.1% for age group 65 and above. The prevalence of overweight males was higher compared to the females for all ages. There were almost no changes for this prevalence for age group 65 and above from FY 2011-2013.
- 3) The prevalence for individuals with visceral fat accumulation (85 cm and above for males and 90 cm and above for females) was about 55% for males 40 and above throughout FY 2011-2013. The prevalence was about 21% for females of age 40-64, and about 27% for females of 65 years old and above, and the prevalence has not changed for the most part. The prevalence for individuals with visceral fat accumulation increased with age and there was more males compared to females among all age groups. Among males of age 16-39, there was lower prevalence of individuals with visceral fat accumulation in FY 2013 compared to FY 2011.
- 4) The prevalence of hypertensive individuals has decreased each year during the time period of FY 2011-2013 for all age groups and both genders. Among all age groups males had more hypertensive individuals compared to females.
- 5) The prevalence of individuals with urinary sugar positive of (1+) was 0.7% for age group 16-39 for FY 2011. This prevalence has increased with age and was 3.2% for age group 65 and above. Among all age groups, there were more males with (1+) or more urinary sugar positive compared to women. The prevalence of individuals with urinary sugar positive for age group 40 and above has decreased each year.
- 6) The prevalence of individuals with urinary protein positive of (1+) was 1.1% for age group 16-39 in FY 2011. This prevalence then doubled in FY 2012 to 2.2%, and has also increased in FY 2013 to 2.4%. There were no clear changes in frequency for age group 40 and above throughout FY 2011-2013.
- 7) The positive prevalence of individuals with (1+) urine occult blood (with the exception of during menstruation) for each age group in FY 2011 was 3.0% for age group 16-39; 5.6% for age group 40-64; and 7.4% for age group 65 and above. The positive frequency of individuals with urine occult blood increased with age. This tendency was about the same compared to FY 2012 and FY 2013.
- 8) The average creatinine value of each age group showed about the same value for both genders from FY 2011-2013. This value had a tendency to increase with age. For all age groups and both genders, high value of creatinine (1.35 mg/dL and above for males and 1.15 mg/dL and above for females) that indicates a decrease in kidney function was less than 1% among individuals of 64 year olds and younger.

- 9) The average value of eGFR showed the same value for both genders throughout FY 2011-2013, and decreased with age. The prevalence of individuals with less than eGFR 60 mL/ min/1.73 m<sup>2</sup> indicating light decrease in kidney function in FY 2011 was: 0.2% for age group 16-39; 6.6% for age group 40-64; and 28.6% for age group 65 and above, the highest prevalence among all groups. This prevalence was similar in FY 2012 and FY 2013.
- 10) The prevalence of individuals with impaired glucose tolerance with fasting plasma glucose of 110 mg/dL and above was 1.9% for age group 16-39 in FY 2011. This prevalence increased with age and was 26.1% for age group 65 and above. The prevalence of individuals with impaired glucose tolerance was higher among females compared to males among all age groups. The prevalence of individuals with 130 mg/dL and above for age group 40 and above has decreased each year and there has been a sign of improvement in blood sugar management.
- 11) The prevalence of individuals with impaired glucose tolerance with levels of HbA1c 6.0 % and above was 1.6% for age groups 16-39 in FY 2011. This prevalence increased with ages and is 18.7% for age group 65 and above. There has been an increase among all ages each year. For all age groups, females had higher prevalence of individuals with impaired glucose tolerance compared to males. However, the prevalence of levels HbA1c 8.0% and above have decreased each year. There has been an increase in the number of individuals with impaired glucose tolerance, but there has been a sign of improvement in blood sugar management.
- 12) Lipid metabolism abnormality that includes High LDL cholesterol blood disease, hypertriglyceridemia, and low HDL cholesterol blood disease were respectively about 13%, 7%, and 3% for the age group 7-15, and have increased with age. On the other hand, the prevalence has slightly decreased in FY 2012 for age group 65 and above.
- 13) Results above the reference inferral for AST, ALT, and γ-GT (i.e., ≥51 U/L) were commonly found among males for age group 40-64. This prevalence has deteriorated from FY 2011 to FY 2012 for age group 40-64 that displayed higher frequencies, but this level returned to its initial level in FY 2013, indicating some improvement.
- 14) The prevalence of individuals with hyperuricemia with a uric acid level of 7.1mg/dL and above for males was 4.7% for age group 7-15 and 18.5% for age group 16-39. There were more males with hyperuricemia for all age groups compared to females and this prevalence has increased through FY 2011-2013.
- 15) Since FY 2011, there were no changes in the value of RBC, WBC or platelet count among children and adults.
- 16) Among the differential white blood count the actual average value of neutrophil, lymphocyte, monocyte, eosinophil and basophil did not display significant changes throughout FY 2011-2013 for each age group.

## The implementation status of the Mental Health and Lifestyle Survey

Reported on 25 December 2014

## 1. FY 2013 Survey response and status of support (as of Oct 31<sup>st</sup>, 2014)

## 1.1 Response state

Category	Number of	Number of	Response
	people	responses	rate
Children	26,513	9,495	35.8%
General	185,859	46,386	25.0%
Total	212,372	55,881	26.3%

Number of responses and response rate

## 1.2 Response results (tentative)

Refer to the separate sheet "2013 Mental Health and Lifestyle Survey' debrief report (tentative)."

## 1.3 Status of support

## 1.3-1 Support by phone calls

From the responses, we determine individuals who we assume require support, and clinical professionals such as clinical psychologists, public health nurses, and nurses call them to provide support in order to resolve issues regarding mental health and lifestyle habits.

## A) Scale of support

Category	Number of people in need of support <sup>1</sup>	Required support rate	Number of correspondence <sup>2</sup>	Correspondence rate	Number of people who received support <sup>3</sup>	Support completion rate
Children	449	4.7%	449	100%	398	88.6%
General	3,018	6.5%	3,018	100%	2,652	87.9%
Total	3,467	6.2%	3,467	100%	3,050	88.0%

1) Number of people who require support

Children : Individuals who score 20 points or more on SDQ (regarding children's emotion and action).

General Public : Individuals who score 13 points or more on K6 (Overall mental status) and score50 points or more on PCL (Trauma reaction), or those who score 17 points or moreon K6 regardless of PCL score.

Number of people who require support: Those who were deemed to require support by  $Oct 31^{st}$ .

#### 2) Number of correspondences

Those to whom at least one phone call has been made (including unanswered phone calls) according to response content, and those who have not listed their phone number on the survey.

3) Number of supported people

Those for whom support has been completed. These also include people for whom support has been completed via written document (refer to "B. Written support").

Category	Number of people in need of support <sup>1</sup>	Required support rate	Number of correspondences <sup>2</sup>	Correspon dence rate	Number of people who received support <sup>3</sup>	Support completion rate
Children	39	0.4%	39	100%	37	94.9%
General	820	1.8%	820	100%	722	88.0%
Total	859	1.5%	859	100%	759	88.4%

#### B) Support by items other than scale

2) 3) Refer to A) above

4) Number of people who require support

Individuals that were determined to have higher level emergencies among those who require support based on the contents of free response and those shown on the margins of the survey.

Those who have conditions such as high blood pressure and diabetes who are not currently attending a hospital as an outpatient with a BMI level of 27.5 or above and have experienced a 3kg or above body weight increase ("General public").

Those with conditions such as high blood pressure and diabetes who are currently not attending a hospital as an outpatient, while drinking 3 *go* (around half a liter) of alcohol daily ("General public").

Number of people who require support: Those who were determined to require support by Oct 31<sup>st</sup>.

#### 1.3-2 Written support

As a consultation counter, we have sent a situation confirmation document with a post card enclosed for reply in order to confirm the current health status and the necessity of phone consultation as well as to provide information regarding the mental health and lifestyle habits survey hotline.

A) Support by scale: Support is provided to individuals whose SDQ, K6, and PCL values go above the reference values in previous studies (SDQ: 16, K6:13, PCL: 44) and who do not fall within those intended for phone support.

Category	Number of people who will receive a situation confirmation document	Number of responses	Response rate	Number of people who require phone support⁵	Phone support	Support completion rate
Children	634	267	42.1%	26	21	80.8%
General	5,113	2,002	39.2%	462	441	95.5%
Total	5,747	2,269	39.5%	488	462	94.7%

5) Number of people who require phone support

Those who request phone consultation and those that were determined to require phone support based on content written in space for correspondence.

- B) Support for individuals who apply to the criteria below in terms of items other than the scale and who do not fall under those mentioned above who require support. Support criteria :
  - 1. Individuals who have not consulted necessary medical institutions.
  - 2. Individuals who are not satisfied with the quality of sleep, are less active and feel depressed during the day and have not received medical consultation.
  - 3. Individuals with lower urgency levels among those who have been determined to require support based on free responses and contents included in the margin of page.

Category	Number of people who will receive a situation confirmation document	Number of responses	Response rate	Number of people who require phone support <sup>5</sup>	Number of support cases	Support completion rate
Children	108	45	41.7%	9	9	100%
General	2,433	1,024	42.1%	133	121	91.0%
Total	2,541	1,069	42.1%	142	130	91.5%

5) Refer to A) above

1.3-3 Support provided in coordination with municipalities

Situations of individuals who were determined to require continuous support are shared with municipalities. For continuous support, municipalities coordinate with the Fukushima Kokoro no Care Center (Fukushima Mental Health Care Center) as necessary based on the judgment of each municipality.

Number of cases handed over to municipalities: 61

#### 1.3-4 Other support

We also provide consultation to individuals who directly call the mental health and lifestyle habits survey hotline.

Support provided upon request: 25

#### 1.4 Future policies regarding support

Among individuals that are subject to telephone support and written support, those who were not able to receive phone support will instead receive an information pamphlet.

For CAGE (question items regarding alcohol intake), a pamphlet regarding alcohol intake will be sent to individuals who correspond to 2 items or more but do not meet the criteria mentioned above for requiring support.

#### 2. The results of interview survey (general public) FY 2013

In succession of FY 2012, in order to establish a support structure to provide support regarding mental health and lifestyle habits, we have conducted an interview survey among 38 people who have responded to the FY 2012 survey and 13 people who have been examined at psychiatric organizations.

As a result, the validity of PCL points (50 points and above) that are part of the current phone support criteria has been confirmed. In addition, the points that require attention for phone support were clarified based on comprehensive judgment.

#### 3. The implementation plan for the FY 2014 survey

3.1 The approach for the FY 2014 survey

During the three-year period from FY 2011 to FY 2013, we have conducted a detailed factual investigation regarding the mental health and lifestyle habits of residents.

For the FY 2014 survey, we eliminated half of the original question items for the aim of improving the response rate by lightening the burden of respondents, and also in order to narrow down question items to those directly connected to care. Furthermore, in order to reflect the feedbacks from the actual support operations, we have added the most requested question items from 13 municipalities.

#### 3.2 Objective

Based on the survey results from FY 2011 to FY 2013, we shall continue to monitor the transition of mental health and lifestyle habits and provide support.

Furthermore, as mentioned above, we shall provide more effective care to residents by narrowing items down to those directly related to support.

- 3.3 Questionnaire survey
- 3.3-1 Group : Residents (around 210 thousand people) of the evacuation area (as of the time of mailing of the FY 2011 questionnaire survey)
- 3.3-2 Methods : Questionnaire surveys (self-administering or response by guardian) were distributed by postal mail.

## 3.3-3 Categories

Category	Targets	Response format
General public	Those born before April 1 <sup>st</sup> 1999	self-administering
Middle school students	Those born between April 2 <sup>nd</sup> 1999 and April 1 <sup>st</sup> 2002	Response by guardian (partially self-administering)
Elementary school students	Those born between April 2 <sup>nd</sup> 2002 and April 1 <sup>st</sup> 2008	Response by guardian
Ages 4-6	Those born between April 2 <sup>nd</sup> 2008 and April 1 <sup>st</sup> 2011	Response by guardian
Ages 0-3	Those born between April 2 <sup>nd</sup> 2011 and April 1 <sup>st</sup> 2014	Response by guardian

## 3.3-4 Main survey items

- The current mental and physical health status
- Lifestyle habits (Diet, sleep, smoking, exercise, etc.)
- Recent behavior
- Current living situation, human relations ("general public")

3.3-5 Mailing period : To be mailed out sequentially starting from the end of January 2015

3.3-6 Correspondence after the survey

- Doctors from the Medical University will evaluate and analyze the response contents. Those who were deemed to require consultation and support based on their mental health and lifestyle habits will receive phone support by a mental health support team composed of professionals such as clinical psychiatrists, nurses and public health nurses.
- Those determined to require an examination by a doctor based on services such as phone consultation, will be introduced to "Registered doctors (※Refer to the next item "4 Registered doctors") of a medical institution within the prefecture. Furthermore, if continuous support is required, we shall consider and provide the

required support in coordination with the municipalities in the evacuation areas. In this regard, if the individual is determined to require mental care visits, we shall provide further support in coordination with Fukushima Kokoro no Care Center.

- If an individual is determined to require further mental health care by a specialist based on the judgment of a registered doctor, the Medical University will take action (regular medical practice). Specifically, children will receive support from the Kodomo no Kokoro Shinryo Center (Children's mental consultation center), while adults will receive support from the psychosomatic department.
- We shall provide support by a radiation health consultation team composed of instructors from the Medical University in cases where the mental health support team receives consultations regarding radiation and it is determined that support from applicable medical specialists are required. Furthermore, among the health consultations caused by the effect of radiation, if direct examination is required, we shall consider providing support by medical specialists.
- 3.4 Questionnaire survey sheet (draft) (Refer to separate document)
- 3.5 Schedule

Year/months		2014		2015		
Implementation items		Oct-Dec		Jan	Feb	Mar
Questionnaire	Printing and sending out questionnaires					
survey	Collecting and inputting data of questionnaires					
	Consultation/support		l I			

## 4. Registered doctor

## 4.1 Definition

A doctor who is assigned in cases where an individual is determined to require examination by medical specialists such as psychiatrists and pediatricians based on results of the survey regarding mental health and lifestyle habits.

4.2 Requirements for registration

Must have followed lecture courses hosted or accredited by the Medical University.

## 4.3 Number of registered doctors (as of Oct 31st 2014)

143 doctors (from 83 medical institutions)

[Reference documents] Regarding the distribution of reference points in the FY 2013 survey

Children

Items	Distribution	Definitive value	Definitive value	Tentative value for
[Reference	in previous	for the 2011	for the 2012	the 2013 survey
points]	research	survey	survey	As of Oct 31 <sup>st</sup>
		As of Oct 31 <sup>st</sup>	As of Oct 31 <sup>st</sup>	2014
		2012	2013	Number of valid
		Number of valid	Number of valid	responses <sup>4</sup>
		responses	responses	(7,784)
		(14,209)	(8,988)	
SDQ (children's emotions and behavior) [16 points or more]	9.5% <sup>1</sup>	21.2%	15.4%	$14.2\%^4$

#### General public

Ocherar publi	6			
Items	Distribution	Definitive values	Definitive values	Tentative values for
[Reference	in previous	for the 2011	for the 2012	the 2013 survey
points]	research	survey	survey	As of Oct 31 <sup>st</sup> 2014
		As of Oct 31 <sup>st</sup>	As of Oct 31 <sup>st</sup>	Number of valid
		2012	2013	responses <sup>4</sup>
		Number of valid	Number of valid	(K6: 38,069)
		responses	responses	(PCL: 38,161)
		(K6 : 59,807)	(K6: 45,229)	
		(PCL: 60,704)	(PCL: 43,743)	
K6				
(Generic				
assessment				
of mental	$3.0\%^2$	14.6%	11.7%	$9.7\%^4$
health)				
[13 points or				
more]				
PCL				
(trauma				
reactions)	20.1% <sup>3</sup>	21.6%	17.4%	$15.9\%^{4}$
[44 points				
or more]				

 Children of ages 4-12 in regional communities of Japan Matsuishi T, et al. (2008) Scale properties of the Japanese version of the Strengths and Difficulties Questionnaire (SDQ): a study of infant and school children in community samples. Brain & Development. 30: 410-415.

#### 2) Local residents in Japan

Kawakami N, distribution and related factors of mental health conditions based on the nationwide K6 questionnaire survey.
The 2006 Health Labour Sciences Research Grant (Research on Applied Use of Statistics and Information). Research on the consideration of a system that understands and analyzes statistical information regarding the health condition of citizens from a household perspective. Divided research document

- 3) Frequency among rescue, recovery and cleanup workers after the 2001 World Trade Center Terrorist Attack in New York City, the United States. Stellman JM, et al. (2008) Enduring mental health morbidity and social function impairment in World Trade Center rescue, recovery, and cleanup workers: the psychological dimension of an environmental health disaster. Environmental Health Perspectives. 116(9): 1248–1253.
- 4) Since these are tentative values, they may differ from definitive values that will be reported later.

#### Overview of the tentative results of the FY 2013 Mental Health and Lifestyle Survey

#### 1. Objective

Since the Great East Japan Earthquake and the Fukushima Daiichi nuclear disaster that occurred on March 11<sup>th</sup> 2011, a Mental Health and Lifestyle Survey for prefectural inhabitants has been conducted from 2011 in order to understand the effects of mental pain and trauma caused by frightening experiences including fear of radiation, living in evacuation centers, and loss of property, and to provide support through appropriate medical care.

For mental health care, middle/long-term countermeasures are required. In order to accomplish this, we must communicate to those that we continue to monitor and support their mental and physical health. Thus, we have again conducted the survey by questionnaires as it is necessary to understand the changes and factors in the mental and physical condition of residents and provide appropriate support.

#### 2. Methods

#### 1) Population

Those of the FY 2013 survey include residents in areas such as the evacuation zones designated by the government as of March 11<sup>th</sup> 2011 and those born in those areas before April 1<sup>st</sup> 2013. Specifically, this survey was for 212,372 citizens who are registered as residents in the following municipalities: Hirono town, Naraha town, Tomioka town, Kawauchi village, Okuma town, Futaba town, Namie town, Katsurao village, Iitate village, Minami Soma city, Tamura city, Kawamata town and parts of Date city (areas related to specified locations recommended for evacuation).

Ages 0-3 version: Individuals born from April  $2^{nd}$  2010 to April  $1^{st}$  20134,164Ages 4-6 version: Individuals born from April  $2^{nd}$  2007 to April  $1^{st}$  20105,169Elementary school version : Individuals born from April  $2^{nd}$  2001 to April  $1^{st}$  2007 11,167Middle school version : Individuals born from April  $2^{nd}$  1998 to April  $1^{st}$  2001General public version : Individuals born before April  $1^{st}$  1998185,859

#### 2) Methods

We divided the population as shown above and mailed the questionnaire (self-administered or filled out by a guardian).

#### 3) Data collection period

The participants were required to respond during the period of Feb 5<sup>th</sup> 2014 to Feb 28<sup>th</sup> 2014. The number of surveys entered into the system by July 9<sup>th</sup> 2014 was 34,793.

#### 4) Number of valid responses

For the tentative version, the numbers of valid responses subject to the collection (valid response rate) were the following: 1,281 individuals (30.8%) for the ages 0-3 version;

1,565 individuals (30.3%) for the ages 4-6 version; 3,001 individuals (26.9%) for the elementary school version; 1,348 individuals (22.4%) for the middle school version; and 27,598 individuals (14.8%) for the general public version.

The results were collected for each item by questionnaire. The survey results are indicated in the report. As there are missing values in each item, the total may not match the abovementioned valid responses. Moreover, since the ratios (%) in the report have been rounded to the nearest whole number, there are instances where the total does not add up to 100%. Since figures of this collection indicated in this paper are tentative, they may differ from the ones that will be reported in the definitive version.

#### 3. Summary of Tentative Values in the Collection of the FY 2013 Survey

For the survey regarding children's emotions and behavior (SDQ), elementary school children and children aged 4-6 had higher ratios of those who have more than the reference point (16 points or more) compared to those in middle school. Among all ages, boys/males (ages 4-6: 16.1%, elementary school: 16.1%, and middle school 15.8%) tend to have higher ratios of those who have more than the reference point compared to girls/females (ages 4-6: 12.6%, elementary school: 12.5%, and middle school: 11.0%).

For the overall mental health condition (K6) and trauma reaction (PCL), those with percentages higher than the reference point (K6:13 points or more, PCL:44 points or more) were the lowest among those aged 10-19, and the highest among those aged 70 and more (K6: Ages 10-19 4.4%, ages 70 and above 11.5%, PCL: ages 10-19 3.8%, ages 70 and above 24.7%). Furthermore, females (K6: 11.5%, PCL: 18.2%) had a higher tendency to display percentages above reference point compared to males (K6:8.9%, PCL: 15.9%).

As for sleeping hours, the average values for ages 0-3, 4-6, elementary school students, middle school students and the general public was 10h 0min, 9h 46min, 8h 55min, 7h 11min, 7h 2min, respectively. As the age group increased, there was a tendency for the sleeping hours to become shorter.

As for exercise, the percentage of those who "almost never exercise (excluding exercises in physical education class for elementary and middle school children)" was 10.4% for ages 2-3, 14.6% for ages 4-6, 40.4% for elementary school children, 31.9% for middle school children, and 44.8% for the general public. Although these cannot be compared unconditionally, there was a higher tendency for elementary school students and the general public to respond that they "almost never exercise".

(Note) The question about exercise habits was for individuals over 2 years old.

# FY 2013 Fukushima Health Management Survey

Mental Health and Lifestyle Survey

**Result Report** 

(Tentative)

Fukushima Medical University

**Radiation Medical Science Center** 

(December 2014)

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FY 2013 Fukushima Health Management Survey

Mental Health and Lifestyle Survey Collected results by questionnaire type (Tentative)

#### The result summary of the FY 2013 Mental Health and Lifestyle Survey

#### 1. Objective

Ever since the Great East Japan Earthquake and Fukushima Daiichi nuclear disaster of March 11 in 2011, we have conducted the Fukushima Health Management Survey, Mental Health and Lifestyle Survey from 2011 and have been providing support in order to understand the mental health and lifestyle habits and provide appropriate care to citizens who endured mental pain and trauma from terrifying experiences such as concerns regarding radiation, evacuation life and loss of property.

For mental health care, middle to long-term countermeasures are required. In order to accomplish this, we must convey that we will continue to monitor and support their mental and physical health. In order to understand the changes and factors of their mental and physical health and provide appropriate support according to the situation, this study conducted another questionnaire survey this year.

#### 2. Method

#### 1) Population

Those in the FY 2013 survey are individuals who were born by Apr 1<sup>st</sup> 2013 and reside in nationally designated evacuation areas at the time of Mar 11 2011. Specifically, these include 212,372 registered citizens of the following municipalities: Hirono town, Naraha town, Tomioka town, Kawauchi village, Okuma town, Futaba town, Namie town, Katsurao village, Iitate village, Minamisoma city, Tamura city and Kawamata town and parts of Date city (designated areas for recommended evacuation).

For age group 0-3:	
Individuals born during the time period from Apr 2 <sup>nd</sup> 2010 to April 1 <sup>st</sup> 2013	4,164
For age group 4-6:	
Individuals born during the time period from Apr 2 <sup>nd</sup> 2007 to April 1 <sup>st</sup> 2010	5,169
For elementary school students:	
Individuals born during the time period from Apr $2^{nd}$ 2001 to April $1^{st}$ 2007	11,167
For middle school students:	
Individuals born during the time period from Apr $2^{nd}$ 1998 to April $1^{st}$ 2001	6,013
For the general public: Individuals born before Apr 1 <sup>st</sup> 1998	185,859

#### 2) Method

We sent questionnaires (answered by self or by guardian) based on the target categories listed above.

#### 3) Period of totalization

Participants had to answer the questionnaire during the time period from Feb 5<sup>th</sup> 2014-Feb 18<sup>th</sup> 2013. 34,793 data entries were made by Jul 9<sup>th</sup> 2013.

#### 4) Number of valid responses

Valid number of responses (valid response rate) that were collected for the tentative version of the questionnaire was: 1,281 (30.8%) for age group 0-3; 1,565 (30.3%) for age group 4-6; 3,001 (26.9%) for elementary school students; 1,348 (22.4%) for middle school students; and 27,598 (14.8%) for the general public.

The results for each item were collected by questionnaire type. The collected results are shown below in the result report. Further, since there are missing values for each item, the total may not match the above mentioned number of valid responses. Further, the total may not add up to 100% since the ratios of the report have been rounded to whole numbers. Since the collected values are tentative, it is possible that the final version may contain different values.

## Results of the FY 2013 Mental Health and Lifestyle Survey (0-3)

Among 4,164 people (age group 0-3) in the survey regarding mental health and lifestyle habits, the valid response count was 1,281 (30.8%). The breakdown was 654 (51.1%) males and 627 (48.9%) females and the average age was 2.0 years old.

As for the current address, 910 (71.1%) lived within the prefecture and 369 (28.9%) outside the prefecture.

## 1. The health condition of the child (Q1)

The ratios for the health condition were: 415 (33.1%) for 'Very good'; 533 (42.5%) for 'good'; 292 (23.3%) for 'normal'; 14 (1.1%) for 'bad'; and 0 (0.0%) for 'very bad'.

## 2. The current height and weight of the child (Q2)

The average height/weight of boys were: 78.1cm/11.0kg for 1 year olds; 88.2cm/12.7kg for 2 year olds; and 95.8cm/15.0kg for 3 year olds. The average height/weight of girls were: 77.8cm/11.0kg for 1 year olds; 86.4cm/12.6kg for 2 year olds; and 94.4cm/14.2kg for 3 year olds.

## 3. Currently treated diseases (Q3)

For currently treated diseases, 917 (74.1%) answered 'no' while 321 (25.9%) answered 'yes'.

The breakdown (multiple answers possible) of diseases for those who answered 'yes' are shown in Table 1 below.

Disease	Count
Common cold	134
Atopic dermatitis	54
Asthma	35
Otitis media	35
Odontopathy	31
Allergic rhinitis	21
Asthma, atopic dermatitis, allergies, allergic conditions other than nasal inflammation	16
Influenza	11
Sinusitis/ empyema	6
Epilepsy	2
ADHD	2
Other	44

Table 1 The breakdown of currently treated diseases

(Multiple answers)

## 4. Experience of hospitalization (Q4)

For experience of hospitalization, 982 (77.2%) answered 'no' while 290 (2.8%) answered 'yes'. The breakdown of diseases for those who answered 'yes' (multiple answers) are the following in Table 2.

Among those who responded 'yes' to experience of hospitalization, 176 answered that they did not become hospitalized due to a disease within the year (responded 'none'). The breakdown of diseases for those who were hospitalized within the year is shown below in Table 3.

Table 2Breakdown of diseases during hospitalization, Table 3Breakdown of diseases duringhospitalization within the past 1 year

Disease	Count
Respiratory syncytial virus infection	79
Pneumonia	43
Bronchitis	32
Common cold	28
Gastroenteritis	27
Asthma	24
Rotavirus infection	23
Febrile convulsion	22
Mycoplasma pneumonia	20
Inguinal hernia	10
Kawasaki disease	9
Influenza	8
Other	82

Respiratory syncytial virus infection Pneumonia	24 16
Pneumonia	16
Asthma	11
Bronchitis	9
Rotavirus infection	9
Common cold	8
Febrile convulsion	8
Gastroenteritis	6
Inguinal hernia	4
Mycoplasma pneumonia	3
Influenza	2
Kawasaki disease	1
Other	20

(Multiple answers)

(Multiple answers)

#### 5. Medical exam experience (Q5)

- Those who answered 'no' for experience of CT scans were 1,192 (93.3%), 'yes' were 54 (4.2%) and 'I don't know' were 31 (2.4%).
- Those who answered 'no' for experience of examinations using X-rays (except CT and X-ray examination) were 1,168 (92.8%), 'yes' were 50 (4.0%) and 'I don't know' were 40 (3.2%).

Among those who answered 'yes', 38 had a fluoroscopy, 7 had an angiography, and 2 had a nuclear medicine scan.

## 6. Experience of radiation therapy treatment (Q6)

For experience of radiation therapy treatment, those who answered 'no' were 1,251 (97.8%), 'yes' were 11 (0.9%), and 'I don't know' were 17 (1.3%).

## 7. Sleeping hours and naps (Q7)

 The average going-to-bed time was 9:11 PM and the average waking time was 7:14 AM. The average sleeping time was 10 hours. 2) For naps (does your child take naps?), those who answered 'no' were 181 (14.2%) and 'yes' were 1,091 (85.8%). The average nap time was 1 hour and 52 minutes.

### 8. Regular amount of exercise (Q8)

For exercise (what is your regular amount of exercise? (age group 2 and above during the time of questionnaire)) : those who answered 'almost every day' were 370 (43.4%); '2-4 times a week' were 283 (33.2%); 'once a week' were 110 (12.9%); and 'barely exercise' were 89 (10.4%).

## 9. Diet (Q9)

- 1) For breast milk (does your child drink breast milk?), those who answered 'yes' were 193 (15.7%) and 'no' were 1,036 (84.3%).
- 2) The frequency of consuming food (drinks), breakfast, eating out, and pre-cooked food (among those who were 1 year old and above at the time of questionnaire) were as shown in Table 4 (next page).

## 10. Child rearing (Q10)

For child rearing (do you ever lose confidence in child rearing?), those who answered 'yes' were 161 (12.6%), 'no' were 566 (44.3%), and 'cannot say' were 551 (43.1%).

Table 4 Frequencies of eating (drinking) pre-cooked foods, breakfast and eating out among the age group 1-3.

		I don't eat	Less than once a week	1-2 times a week	3-4 times a week	5-6 times a week	Everyday	Total
Breal	kfast	10 (0.8%)	0 (0.0%)	2 (0.2%)	18 (1.5%)	36 (3.0%)	1,138 (94.5%)	1,204
Fatin	ng out (excluding	124	688	(0.270)	(1.570)	(3.070)	(94.570)	1,194
	ol lunch)	(10.4%)	(57.6%)	(26.7%)	(2.2%)	(0.2%)	(2.9%)	-,
Pre-c	ooked foods	112	468	445	139	22	11	1,197
		(9.4%)	(39.1%)	(37.2%)	(11.6%)	(1.8%)	(0.9%)	
Cook	ked rice	1	0	6	31	97	1,071	1,206
		(0.1%)	(0.0%)	(0.5%)	(2.6%)	(8.0%)	(88.8%)	
Bread	1	26	169	408	260	133	203	1,199
		(2.2%)	(14.1%)	(34.0%)	(21.7%)	(11.1%)	(16.9%)	
Fish	dishes	22	119	560	388	78	31	1,198
	T	(1.8%)	(9.9%)	(46.7%)	(32.4%)	(6.5%)	(2.6%)	
	Chicken	35	214	658	257	26	9	1,199
		(2.9%)	(17.8%)	(54.9%)	(21.4%)	(2.2%)	(0.8%)	
Meat	Beef, pork	56	151	508	416	53	16	1,20
at		(4.7%)	(12.6%)	(42.3%)	(34.7%)	(4.4%)	(1.3%)	
	Ham, sausage	103	223	452	316	69	28	1,19
		(8.6%)	(18.7%)	(38.0%)	(26.5%)	(5.8%)	(2.4%)	
	Green vegetables	95	163	381	313	136	108	1,19
		(7.9%)	(13.6%)	(31.9%)	(26.2%)	(11.4%)	(9.0%)	
Ve	Red and yellow	35	77	281	410	220	179	1,20
geta	vegetables	(2.9%)	(6.4%)	(23.4%)	(34.1%)	(18.3%)	(14.9%)	
Vegetables	Hypochromic	40	90	270	435	208	158	1,20
S	vegetable	(3.3%)	(7.5%)	(22.5%)	(36.2%)	(17.3%)	(13.2%)	1.10
	Vegetable juice	402	306	213	127	60	88	1,19
		(33.6%)	(25.6%)	(17.8%)	(10.6%)	(5.0%)	(7.4%)	1.00
Ħ	Fruits	43	103	244	285	218	309	1,20
Fruits		(3.6%)	(8.6%)	(20.3%)	(23.7%)	(18.1%)	(25.7%)	1.10
ts	Fruit juice	209	274	262	214	109	129	1,19
		(17.5%)	(22.9%)	(21.9%)	(17.9%)	(9.1%)	(10.8%)	1.20
	Natto	169	206	363	277	125	64	1,20
		(14.0%)	(17.1%)	(30.1%)	(23.0%)	(10.4%)	(5.3%)	1 20
So	Miso soup	50	67	191	248	206	443	1,20
Soy bean	<b>T</b> ( 1) 1	(4.1%)	(5.6%)	(15.9%)	(20.6%)	(17.1%)	(36.8%)	1 20
	Tofu dishes	53	181	434	327	146	60 (5.0%)	1,20
	D 11 11 11 1	(4.4%)	(15.1%)	(36.1%)	(27.2%)	(12.2%)	(5.0%)	1 10
	Boiled beans dish	490	454 (37.0%)	182	59 (4.0%)	11	3	1,19
Milk		(40.9%)	(37.9%)	(15.2%)	(4.9%)	(0.9%)	(0.3%)	1 10
		229 (19.1%)	(10.1%)	149 (12.4%)	173 (14.4%)	121 (10.1%)	405 (33.8%)	1,19
0 11							, ,	1 20
Soy milk		940 (78 1%)	159 (13.2%)	51 (4.2%)	24 (2.0%)	11	18	1,20
Yogurt, fermented milk drink		(78.1%)	(13.2%)	(4.2%)	(2.0%)	(0.9%)	(1.5%)	

(Upper row is the number of individuals/lower row is percentage)

	(4.3%)	(8.6%)	(21.0%)	(26.1%)	(13.0%)	(27.0%)	
--	--------	--------	---------	---------	---------	---------	--

Since there are missing values for each item, totals may not match.

#### Results of the FY 2013 Mental Health and Lifestyle Survey (Age group 4-6)

Among the 5,169 people for the survey regarding mental health and lifestyle habits (age group 4-6), there were 1,565 (30.3%) valid responses. The breakdown was 779 (49.8%) boys and 786 (50.2%) girls with an average age of 4.8 years old.

As for the current address, 1,053 (67.5%) lived within the prefecture and 507 (32.5%) lived outside the prefecture.

#### 1. The health condition of the child (Q1)

The ratios for the health condition were: 404 (26.4%) for 'Very good'; 651 (42.5%)) for 'good'; 458 (29.9%) for 'normal'; 16 (1.0%) for 'bad'; and 3 (0.2%) for very bad.

#### 2. The current height and weight of the child (Q2)

The average height/weight of boys was: 102.7cm/16.8kg for 4 year olds (as of Apr 1<sup>st</sup> 2014), 109.2cm/18.7kg for 5 year olds and 115.7cm/21.4kg for 6 year olds. The average height/weight for girls were: 101.9cm/16.3kg for 4 year olds, 108.5cm/18.4kg for 5 year olds, and 114.6cm/20.8kg for 6 year olds.

#### 3. Currently treated diseases (Q3)

For currently treated diseases, 978 (64.8%) answered 'no' while 531 (35.2%) answered 'yes'. The breakdown of diseases for individuals who answered 'yes' are shown in Table 5.

Disease	Count
Common cold	155
Atopic dermatitis	107
Odontopathy	98
Allergic rhinitis	96
Atopic dermatitis	80
Otitis media	47
Sinusitis/ empyema	32
Asthma, atopic dermatitis, allergies, allergic conditions other than nasal inflammation	24
Influenza	23
Epilepsy	9
ADHD	3
Other	65
<b></b>	

Table 5The breakdown of currently treated diseases

#### 4. Experience of hospitalization (Q4)

For experience of hospitalization, 1,103 (71.3%) answered 'no' while 443 (28.7%) answered 'yes'.

<sup>(</sup>Multiple answers)

The breakdown of diseases for those who answered 'yes' (multiple answers) are the following in Table 6.

Among those who responded 'yes' to experience of hospitalization, 359 answered that they did not become hospitalized due to a disease within the past year (responded 'none'). The breakdown of those who were hospitalized within the past year is shown below in Table 7.

Table 6 Breakdown of diseases durin	ng hospitalization, Table 7	Breakdown of diseases during
hospitalization within the past year		

Disease	Count
Pneumonia	127
Respiratory syncytial virus infection	89
Mycoplasma pneumonia	80
Bronchitis	54
Asthma	53
Gastroenteritis	46
Rotavirus infection	43
Febrile convulsion	41
Common cold	30
Influenza	26
Inguinal hernia	23
Kawasaki disease	15
Other	83
~	

Disease	Count
Pneumonia	15
Mycoplasma pneumonia	9
Febrile convulsion	8
Inguinal hernia	8
Asthma	6
Bronchitis	6
Common cold	5
Gastroenteritis	5
Respiratory syncytial virus infection	4
Rotavirus infection	4
Kawasaki disease	4
Influenza	3
Other	19

(Multiple answers)

(Multiple answers)

### 5. Medical exam experience (Q5)

- 1) Those who answered 'no' for experience of CT scans were 1,411 (90.8%), 'yes' were 96 (6.2%) and 'I don't know' were 47 (3.0%).
- Those who answered 'no' for experience of examinations using X-rays (excluding CT and X-ray examination) were 1,406 (91.3%), 'yes' were 84 (5.5%) and 'I don't know' were 50 (3.2%).

Among those that answered 'yes', 65 had a fluoroscopy, 9 had an angiography, and 2 had a nuclear medicine scan.

### 6. Experience of radiation therapy treatment (Q6)

For experience of radiation therapy treatment, those who answered 'no' were 1,509 (97.2%), 'yes' were 14 (0.9%) and 'I don't know' were 30 (1.9%).

### 7. Sleeping hours and naps (Q7)

- The average going-to-bed time was 9:10 PM and the average waking time was 7:02 AM. The average sleeping time was 9 hours and 46 minutes.
- 2) For naps (does your child take naps?), those who answered 'no' were 1,002 (64.9%), and 'yes' were 543 (35.1%). The average nap time was 1 hour and 39 minutes.

# 8. Regular amount of exercise (Q8)

For exercise (what is your regular amount of exercise?), those who answered 'almost every day' were 612 (41.3%), '2-4 times a week' were 465 (31.4%), 'once a week' were 189 (12.7%), and 'barely exercise' were 217 (14.6%).

# 9. Diet (Q9)

3) The frequency of consuming food (drinks), breakfast, eating out, and pre-cooked food were as shown in Table 8 (next page).

For age group 4-6

		I don't eat	Less than once a week	1-2 times a week	3-4 times a week	5-6 times a week	Everyday	Total
Breakfast		5 (0.3%)	0 (0.0%)	14 (0.9%)	39 (2.5%)	67 (4.3%)	1,437 (92.0%)	1,562
Fatir	1g out	105	1,003	394	11	0	40	1,553
	ding school lunch)	(6.8%)	(64.6%)	(25.4%)	(0.7%)	(0.0%)	(2.6%)	1,000
	cooked foods	114	619	634	146	24	9	1,546
110-0	ooked loods	(7.4%)	(40.0%)	(41.0%)	(9.4%)	(1.6%)	(0.6%)	1,040
Cool	ked rice	0	3	3	61	153	1,340	1,560
		(0.0%)	(0.2%)	(0.2%)	(3.9%)	(9.8%)	(85.9%)	
Brea	d	12	246	568	352	149	232	1,559
		(0.8%)	(15.8%)	(36.4%)	(22.6%)	(9.6%)	(14.9%)	
Fish	dishes	11	143	809	482	71	34	1,550
		(0.7%)	(9.2%)	(52.2%)	(31.1%)	(4.6%)	(2.2%)	
	Chicken	11	253	920	331	30	5	1,550
		(0.7%)	(16.3%)	(59.4%)	(21.4%)	(1.9%)	(0.3%)	
Meat	Beef, pork	20	108	765	561	80	17	1,551
eat		(1.3%)	(7.0%)	(49.3%)	(36.2%)	(5.2%)	(1.1%)	
	Ham, sausage	26	220	684	461	99	47	1,537
		(1.7%)	(14.3%)	(44.5%)	(30.0%)	(6.4%)	(3.1%)	
	Green vegetables	85	182	545	457	144	141	1,554
		(5.5%)	(11.7%)	(35.1%)	(29.4%)	(9.3%)	(9.1%)	
<	Red and yellow	32	106	480	551	210	174	1,553
ege		(2.1%)	(6.8%)	(30.9%)	(35.5%)	(13.5%)	(11.2%)	2
Vegetables	Hypochromic	37	109	416	554	248	185	1,549
les	51	(2.4%)	(7.0%)	(26.9%)	(35.8%)	(16.0%)	(11.9%)	,
	Vegetable juice	650	497	219	94	38	53	1,551
	6 5	(41.9%)	(32.0%)	(14.1%)	(6.1%)	(2.5%)	(3.4%)	,
	Fruits	43	122	345	407	270	366	1,553
Fn		(2.8%)	(7.9%)	(22.2%)	(26.2%)	(17.4%)	(23.6%)	,
Fruits	Fruit juice	349	448	352	203	87	112	1,551
	5	(22.5%)	(28.9%)	(22.7%)	(13.1%)	(5.6%)	(7.2%)	,
	Natto	166	398	608	256	85	44	1,557
		(10.7%)	(25.6%)	(39.0%)	(16.4%)	(5.5%)	(2.8%)	
S	Miso soup	31	80	218	315	317	597	1,558
Soy bean	•	(2.0%)	(5.1%)	(14.0%)	(20.2%)	(20.3%)	(38.3%)	
bea	Tofu dishes	65	283	661	355	136	56	1,556
n		(4.2%)	(18.2%)	(42.5%)	(22.8%)	(8.7%)	(3.6%)	2
	Boiled beans dish	621	666	200	46	12	2	1,547
		(40.1%)	(43.1%)	(12.9%)	(3.0%)	(0.8%)	(0.1%)	, -
Milk		85	101	163	216	256	723	1,544
		(5.5%)	(6.5%)	(10.6%)	(14.0%)	(16.6%)	(46.8%)	,
Soy 1	milk	1,229	229	58	20	5	9	1,550
<i>,</i>		(79.3%)	(14.8%)	(3.7%)	(1.3%)	(0.3%)	(0.6%)	
	art, fermented drink	41	146	372	383	224	393	1,559

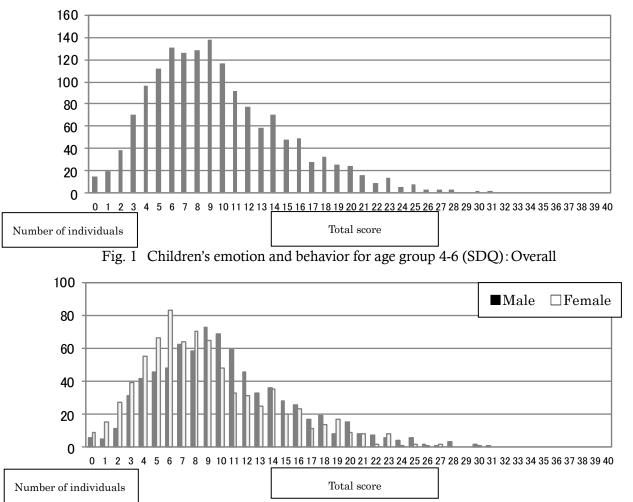
Table 8 Frequencies of eating (drinking) pre-cooked foods, breakfast and eating out among age (Upper row is the number of individuals/lower row is ratio) group 4-6

(2.6%) (9.4%) (23.9%) (24.6%) (14.4%) (25.2%)
---

Since there are missing values for each item, totals may not match.

# 10. Child's emotions and behavior (Q10)

- For child's emotions and behavior (survey on child's emotions and behavior (SDQ Japanese version)), among the 1,562 valid responses, 224 (14.3%) were 16 points<sup>1</sup> and above, and 89 (5.7%) were 20 points<sup>2</sup> and above (Fig. 1). The average total points were 9.7 points. For boys, among the 778 valid responses, 125 (16.1%) were 16 points and above; 55 (7.1%) were 10 points and above. For girls, among the 784 valid responses, 99 (12.6%) were 16 points and above; and 34 (4.3%) were 20 points and above (Fig. 2). The average total score for boys was 10.4 points while the total score for girls was 9.0.
- 2) Regarding whether children have any issues in one or more areas regarding emotions, focus, behavior or interaction with others, those that answered 'no' were 1,156 (74.4%), 'yes (minor issues)' were 324 (20.9%), 'yes (clear issues)' were 63 (4.1%), and 'yes (serious issues)' were 10 (0.6%).
- 3) Among those who answered 'yes' for 2), regarding whether or not their child is upset or concerned about the issue, those who answered 'not at all' were 148 (38.6%); 'only a little' were 211 (55.1%); 'very' were 18 (4.7%); and 'greatly' were 6 (1.6%).



# Fig. 2 Children's emotion and behavior for age group 4-6 (SDQ): By gender

- 1) 16 points: A standard value indicated by previous research
- 2) 20 points : A standard established by doctors, etc. from Fukushima Medical University to provide support.

# Results of the FY 2013 Mental Health and Lifestyle Survey (For elementary school students)

Among 11,167 people of the Mental Health and Lifestyle Survey (for elementary school students), 3,001 (26.9%) provided valid responses. The breakdown was 1,528 (50.9%) boys and 1,473 (49.1%) girls with an average age of 9.4 years old.

As for the current address, 2,130 (71.1%) lived within the prefecture and 865 (28.9%) lived outside the prefecture.

#### 1. The health condition of the child (Q1)

The ratios for the health state were: 655 (22.8%) for 'Very good'; 1,275 (44.3%)) for 'good'; 906 (31.5%) for 'normal'; 34 (1.2%) for 'bad'; and 6 (0.2%) for very bad.

### 2. The current height and weight of the child (Q2)

The average height/weight of boys was: 121.5cm/25.0kg for 1st graders; 127.6cm/29.1kg for 2<sup>nd</sup> graders; 132.6cm/31.6kg for 3<sup>rd</sup> graders; 138.5cm/35.8kg for 4<sup>th</sup> graders; 143.8cm/39.1kg for 5<sup>th</sup> graders; and 152.4cm/44.9kg for 6<sup>th</sup> graders. The average height/weight of girls were: 120.5cm/23.3kg for 1<sup>st</sup> graders; 125.1cm/26.8kg for 2<sup>nd</sup> graders; 131.6cm/29.4kg for 3<sup>rd</sup> graders; 139.1cm/34.3kg for 4<sup>th</sup> graders; 145.0cm/38.3kg for 5<sup>th</sup> graders; and 150.3cm/44.2kg for 6<sup>th</sup> graders.

### 3. Currently treated diseases (Q3)

For currently treated diseases 1,881 (65.6%) answered 'no' while 986 (34.4%) answered 'yes'. The breakdown (multiple answers) of diseases for those who answered 'yes' are shown in Table 9 below.

Disease	Count
Allergic rhinitis	352
Odontopathy	222
Atopic dermatitis	148
Asthma	137
Common cold	110
Sinusitis/ empyema	77
Asthma, atopic dermatitis, allergies, allergic conditions other than nasal inflammation	52
Influenza	49
ADHD	45
Otitis media	35
Epilepsy	14
Other	133

Table 9 The breakdown of c	currently treated diseases
----------------------------	----------------------------

<sup>(</sup>Multiple answers)

#### 4. Experience of hospitalization (Q4)

For experience of hospitalization, 1,929 (66.3%) answered 'no' while 982 (33.7%) answered 'yes'.

The breakdown of diseases for those who answered 'yes' (multiple answers) are the following in Table 10.

Among those who responded 'yes' to experience of hospitalization, 884 answered that they did not become hospitalized due to a disease within the past year (responded 'none'). The breakdown of those who were hospitalized within the past year is shown below in Table 11.

Disease	Count
Pneumonia	269
Asthma	134
Mycoplasma pneumonia	129
Bronchitis	120
Gastroenteritis	120
Respiratory syncytial virus infection	106
Rotavirus infection	83
Febrile convulsion	83
Influenza	76
Common cold	63
Inguinal hernia	59
Kawasaki disease	29
Other	220

 Table 10
 Breakdown of diseases during hospitalization

Table 11Breakdown of diseases during hospitalizationwithin the past year

Disease	Count
Mycoplasma pneumonia	8
Asthma	4
Pneumonia	3
Common cold	3
Gastroenteritis	3
Inguinal hernia	3
Influenza	2
Febrile convulsion	2
Respiratory syncytial virus infection	1
Bronchitis	1
Kawasaki disease	1
Rotavirus infection	0
Other	21

(Multiple answers)

(Multiple answers)

#### 5. Medical exam experience (Q5)

- 1) Those who answered 'no' for experience of CT scans were 2,470 (83.0%), 'yes' were 368 (12.4%) and 'I don't know' were 137 (4.6%).
- 2) Those who answered 'no' for experience of examinations using X-rays (excluding CT and roentgenological examination) were 2,606 (88.9%), 'yes' were 176 (6.0%) and 'I don't know' were 151 (5.1%).

Among those who answered 'yes', 118 had a fluoroscopy, 29 had an angiography, and 10 had a nuclear medicine scan.

#### 6. Experience of radiation therapy treatment (Q6)

For experience of radiation therapy treatment, those who answered 'no' were 2,868 (96.7%), 'yes' were 28 (0.9%), and 'I don't know' were 71 (2.4%).

#### 7. Sleeping hours and naps (Q7)

The average going-to-bed time was 9:29 PM and the average waking time was 6:29 AM. The

average sleeping time was 8 hours and 55 minutes.

# 8. Regular amount of exercise (Q8)

For exercise (What is your regular amount of exercise?): those who answered 'almost every day' were 200 (7.1%); '2-4 times a week' were 764 (27.0%); 'once a week' were 722 (25.5%); and 'barely exercise' were 1,143 (40.4%).

# 9. Diet (Q9)

The frequency of consuming food (drinks), breakfast, eating out, and pre-cooked food were as shown in Table 12 (next page).

Table 12	Frequencies of eating (drinking) pre-cooked foods, breakfast and eating out
among ele	ementary school students

		I don't eat	Less than once a week	1-2 times a week	3-4 times a week	5-6 times a week	Everyday	Total
Break	rfast	18 (0.6%)	6 (0.2%)	25 (0.8%)	53 (1.8%)	112 (3.7%)	2,777 (92.8%)	2,991
	g out (excluding bl lunch)	225 (7.6%)	1,961 (66.0%)	660 (22.2%)	16 (0.5%)	3 (0.1%)	105 (3.5%)	2,970
	ooked foods	(7.670) 189 (6.4%)	1,302 (43.9%)	1,152 (38.9%)	276 (9.3%)	26 (0.9%)	(0.6%)	2,963
Cook	ed rice	0	3	18	97	339	2,534	2,991
Bread	1	(0.0%)	(0.1%)	(0.6%) 1,133	(3.2%)	(11.3%)	(84.7%) 368	2,971
Fish o	dishes	(1.7%) 27 (0.9%)	(17.9%) 342 (11.5%)	(38.1%) 1,576 (53.1%)	(21.2%) 881 (20.7%)	(8.6%) 102	(12.4%) $41$	2,969
	Chicken	(0.9%) 20 (0.7%)	(11.5%) 468 (15.8%)	(53.1%) 1,738 (58.7%)	(29.7%) 664 (22.4%)	(3.4%) 57 (1.9%)	(1.4%) 14 (0.5%)	2,961
Meat	Beef, pork	(0.7%) 15 (0.5%)	(15.8%) 176 (5.9%)	(38.7%) 1,318 (44.3%)	(22.4%) 1,243 (41.8%)	(1.9%) 182 (6.1%)	(0.3%) 43 (1.4%)	2,977
ť	Ham, sausage	(0.576) 45 (1.5%)	(5.970) 653 (22.1%)	(44.3%) 1,298 (44.0%)	(41.876) 746 (25.3%)	(0.170) 152 (5.1%)	(1.470) 59 (2.0%)	2,953
	Green vegetables	(1.570) 91 (3.1%)	(22.170) 320 (10.7%)	1,086 (36.4%)	(23.376) 896 (30.1%)	(3.170) 322 (10.8%)	(2.070) 266 (8.9%)	2,981
Veg	Red and yellow	48	301	951	1,031	358	288	2,977
Vegetables	Hypochromic	(1.6%)	(10.1%) 173	(31.9%) 726	(34.6%) 1,166	(12.0%) 492	(9.7%) 369	2,972
0,	Vegetable juice	(1.5%) 1,351	(5.8%) 878	(24.4%) 384	(39.2%) 199	(16.6%) 66	(12.4%) 98	2,976
ч	Fruits	(45.4%) 67	(29.5%) 452	(12.9%) 865	(6.7%) 755	(2.2%)	(3.3%) 479	2,982
Fruits	Fruit juice	(2.2%) 841	(15.2%) 990	(29.0%) 620	(25.3%) 289	(12.2%) 105	(16.1%) 125	2,970
	Natto	(28.3%) 303 (10.2%)	(33.3%) 846 (28.4%)	(20.9%) 1,153 (38.7%)	(9.7%) 465	(3.5%) 137	(4.2%) 79	2,983
Soj	Miso soup	(10.2%) 40 (1.3%)	147	360	(15.6%) 651 (21.0%)	(4.6%) 600 (20.1%)	(2.6%) 1,181	2,979
Soy bean	Tofu dishes	96	(4.9%) 591	(12.1%) 1,251	(21.9%) 710	(20.1%) 214	(39.6%) 119	2,981
	Boiled beans dish	(3.2%) 1,185	(19.8%) 1,293 (43.6%)	(42.0%) 373	(23.8%) 88 (2.0%)	(7.2%) 16	(4.0%) 12	2,967
Milk		(39.9%) 105 (3.5%)	113	(12.6%) 158 (5.3%)	(3.0%) 232 (7.8%)	(0.5%) 574 (10.3%)	(0.4%) 1,790	2,972
Soy n	nilk	(3.5%) 2,432 (81.8%)	(3.8%) 391 (13.2%)	(5.3%) 91 (3.1%)	(7.8%) 34 (1.1%)	(19.3%) 11 (0.4%)	(60.2%) 14 (0.5%)	2,973

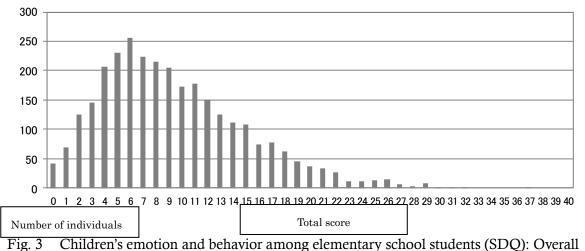
(Upper row is the number of individuals/lower row is ratio)

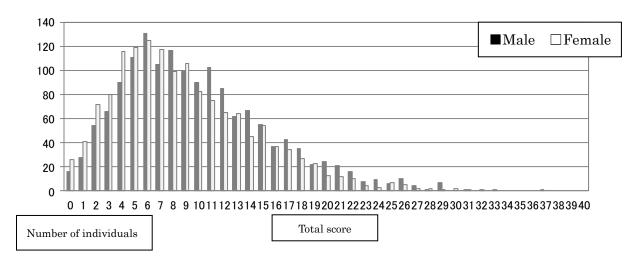
Yogurt, fermented milk drink	102	367	785	702	367	665	2,988
	(3.4%)	(12.3%)	(26.3%)	(23.5%)	(12.3%)	(22.3%)	

Since there are missing values for each item, totals may not match.

# 10. Child's emotions and behavior (Q10)

- For child's emotions and behavior (survey on child's emotions and behavior (SDQ Japanese version)), among the 2,996 valid responses, 429 (14.3%) were 16 points<sup>1</sup> and above, and 20 171 (5.7%) were 20 points<sup>2</sup> and above (Fig. 3). The average total points were 9.4 points. For boys, among the 1,524 valid responses, 245 (16.1%) were 16 points and above, and 108 (7.1%) were 20 points and above. For girls, among the 1,472 valid responses, 184 (12.5%) were 16 points and above and 63 (4.3%) were 20 points and above (Fig. 4). The average total score for boys was 9.9 points while the total score for girls was 8.9 points.
- 2) Regarding whether children have any issues in one or more areas regarding emotions, focus, behavior or interaction with others: those who answered 'no' were 2,073 (69.4%); 'yes (minor issues)' were 751 (25.1%); 'yes (clear issues)' were 133 (4.5%); and 'yes (serious issues)' were 30 (1.0%).
- 3) Among those who answered 'yes' for 2), regarding whether or not their child is upset or concerned about the issue: those who answered 'not at all' were 221 (25.0%); 'only a little' were 581 (65.8%); 'very' were 66 (7.5%); and 'greatly' were 15 (1.7%).





# Fig. 4 Children's emotion and behavior among elementary school students (SDQ): By gender

- 1) 16 points: A standard value indicated by previous research
- 2) 20 points: A standard established by doctors, etc. from Fukushima Medical University to provide support.

# Results for the FY 2013 Mental Health and Lifestyle Survey (For middle school students)

Among the 6,013 people for the survey regarding mental health and lifestyle habits (for middle school students), there were 1,348 (22.4%) valid responses. The breakdown was 663 (49.2%) boys and 685 (50.8%) girls with an average age of 13.8 years old.

As for the current address, 1,031 (76.7%) lived within the prefecture and 313 (23.3%) lived outside the prefecture.

#### 1. The health condition of the child (Q1)

The ratios for the health condition were: 262 (30.4%) for 'Very good'; 264 (30.7%) for 'good'; 310 (36.0%) for 'normal'; 23 (2.7%) for 'bad'; and 2 (0.2%) for very bad.

#### 2. The current height and weight of the child (Q2)

The average height/weight of boys was: 159.4cm/53.8kg for 7th graders; 165.3cm/56.9kg for 8th graders; and 167.2cm/60.3kg for 9th graders. The average height/ weight for girls were: 154.2cm/46.0kg for 7th graders; 155.9cm/50.2kg for 8th graders; and 156.8cm/49.8kgfor 9th graders.

#### 3. Sleeping hours (Q3)

- 1) The average sleeping time was 7 hours and 11 minutes.
- 2) For sleep satisfaction, 373 (43.0%) answered 'it's sufficient', 400 (46.1%) answered 'it's not quite enough', and 95 (10.9%) answered 'it's not enough'.

#### 4. Regular amount of exercise (Q4)

For exercise (aside from physical education classes, what is your regular amount of exercise?), those who answered 'almost every day' were 407 (46.7%), '2-4 times a week' were 124 (14.2%), 'once a week' were 62 (7.1%), and 'barely exercise' were 278 (31.9%).

#### 5. Diet (Q5)

The frequency of consuming food (drinks), breakfast, eating out, and pre-cooked food were as shown in Table 13 (next page).

Table 13	Frequencies of eating (drinking) pre-cooked foods, breakfast and eating out
among mi	ddle school students

		I don't eat	Less than once a week	1-2 times a week	3-4 times a week	5-6 times a week	Everyday	Total
Break	tfast	17 (2.0%)	10 (1.1%)	11 (1.3%)	18 (2.1%)	52 (6.0%)	762 (87.6%)	870
	g out (excluding l lunch)	139 (16.1%)	568 (65.9%)	126 (14.6%)	4 (0.5%)	0 (0.0%)	25 (2.9%)	862
Pre-co	ooked foods	56 (6.5%)	347 (40.4%)	342 (39.8%)	83 (9.7%)	19 (2.2%)	12 (1.4%)	859
Cook	ed rice	0 (0.0%)	1 (0.1%)	6 (0.7%)	37 (4.3%)	125 (14.4%)	700 (80.6%)	869
Bread	1	(0.070) 24 (2.8%)	183 (21.2%)	(0.770) 329 (38.1%)	145 (16.8%)	(14.470) 73 (8.5%)	109 (12.6%)	863
Fish o	lishes	17 (2.0%)	115 (13.3%)	440 (51.0%)	237 (27.5%)	40 (4.6%)	13 (1.5%)	862
	Chicken	5 (0.6%)	141 (16.4%)	477 (55.4%)	201 (23.3%)	29 (3.4%)	8 (0.9%)	861
Meat	Beef, pork	(0.8%)	57 (6.6%)	363 (42.1%)	345 (40.0%)	68 (7.9%)	23 (2.7%)	863
	Ham, sausage	26 (3.0%)	193 (22.5%)	372 (43.4%)	197 (23.0%)	49 (5.7%)	21 (2.4%)	858
	Green vegetables	26 (3.0%)	66 (7.6%)	268 (31.0%)	252 (29.1%)	119 (13.8%)	134 (15.5%)	865
Vege	Red and yellow	16 (1.8%)	80 (9.2%)	251 (29.0%)	270 (31.1%)	136 (15.7%)	114 (13.1%)	867
Vegetables	Hypochromic	(2.0%)	46 (5.3%)	175 (20.3%)	309 (35.8%)	151 (17.5%)	164 (19.0%)	862
	Vegetable juice	391 (45.2%)	254 (29.4%)	96 (11.1%)	56 (6.5%)	31 (3.6%)	37 (4.3%)	865
Fr	Fruits	35 (4.0%)	175 (20.2%)	234 (27.1%)	194 (22.4%)	107 (12.4%)	120 (13.9%)	865
Fruits	Fruit juice	240 (27.8%)	264 (30.6%)	169 (19.6%)	90 (10.4%)	54 (6.3%)	46 (5.3%)	863
	Natto	155 (18.0%)	296 (34.3%)	243 (28.2%)	104 (12.1%)	42 (4.9%)	23 (2.7%)	863
Soy	Miso soup	19 (2.2%)	58 (6.7%)	96 (11.1%)	157 (18.1%)	167 (19.2%)	371 (42.7%)	868
Soy bean	Tofu dishes	35 (4.0%)	189 (21.8%)	312 (36.0%)	191 (22.1%)	80 (9.2%)	(6.8%)	866
	Boiled beans dish	359 (41.7%)	344 (40.0%)	112 (13.0%)	36 (4.2%)	4 (0.5%)	5 (0.6%)	860
Milk	1	50 (5.8%)	(10.070) 36 (4.2%)	49 (5.7%)	65 (7.5%)	191 (22.1%)	474 (54.8%)	865
Soy n	nilk	666 (76.8%)	129 (14.9%)	(3.3%)	(2.8%)	(0.8%)	12 (1.4%)	867

(Upper row is the number of individuals/lower row is ratio)

Yogurt, fermented milk drink	54	127	220	185	90	192	868
	(6.2%)	(14.6%)	(25.3%)	(21.3%)	(10.4%)	(22.1%)	

Since there are missing values for each item, totals may not match.

#### 6. Experiences from the earthquake disaster Multiple answers (Q6)

Experiences from the earthquake disaster were: 'earthquake' for 823; 'tsunami' for 114; and 'nuclear power plant accident' for 802; 'none' for 2.

# 7. Currently treated diseases (Q7)

For currently treated diseases 942 (72.9%) answered 'no' while 351 (27.1%) answered 'yes'. The breakdown of diseases for individuals who answered 'yes' are shown in Table 14.

Disease	Count
Allergic rhinitis	122
Odontopathy	73
Atopic dermatitis	50
Asthma	29
Sinusitis/ empyema	21
Asthma, atopic dermatitis, allergies, allergic conditions other than nasal inflammation	20
ADHD	20
Common cold	13
Influenza	11
Epilepsy	9
Otitis media	7
Other	78

Table 14The breakdown of currently treated diseases

(Multiple answers)

#### 8. Experience of hospitalization (Q8)

For experience of hospitalization, 837 (64.7%) answered 'no' while 456 (35.3%) answered 'yes'.

The breakdown of those who answered 'yes' (multiple answers) are as shown in Table 15. Among those who responded 'yes' to experience of hospitalization, 419 answered that they did not become hospitalized due to a disease within the past year (responded 'none'). The breakdown of those who were hospitalized within the past year is shown below in Table 16 (multiple answers).

Disease	Count
Pneumonia	130
Asthma	85
Bronchitis	59
Mycoplasma pneumonia	58
Gastroenteritis	58
Influenza	54
Common cold	36
Febrile convulsion	36
Rotavirus infection	23
Inguinal hernia	18
Kawasaki disease	15
Respiratory syncytial virus infection	13
Other	89

Table 15	Breakdown of	diseases	during	hospitalization

Table 16Breakdown of diseases during hospitalization withinthis year

Disease	Count
Pneumonia	4
Mycoplasma pneumonia	3
Asthma	2
Bronchitis	1
Influenza	1
Febrile convulsion	1
Respiratory syncytial virus infection	0
Common cold	0
Gastroenteritis	0
Rotavirus infection	0
Kawasaki disease	0
Inguinal hernia	0
Other	11

(Multiple answers)

(Multiple answers)

#### 9. Medical exam experience (Q9)

- 1) Those who answered 'no' for experience of CT scans were 1,062 (80.9%), 'yes' were 208 (15.9%), and 'I don't know' were 42 (3.2%).
- Those who answered 'no' for experience of examinations using X-rays (excluding CT and roentgenological examination) were 1,156 (89.1%), 'yes' were 86 (6.6%) and 'I don't know' were 55 (4.2%).

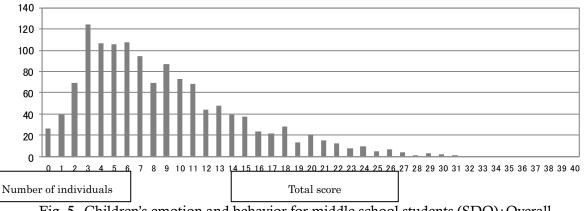
Among those who answered 'yes', 61 had a fluoroscopy, 20 had an angiography, and 2 had a nuclear medicine scan.

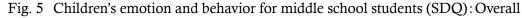
#### 10. Experience of radiation therapy treatment (Q10)

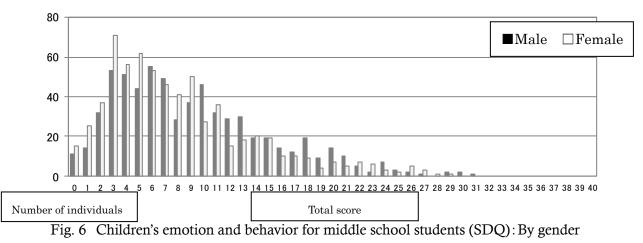
For experience of radiation therapy treatment, those who answered 'no' were 1,278 (97.7%), 'yes' were 7 (0.5%) and 'I don't know' were 23 (1.8%).

# 11. Child's emotions and behavior (Q11)

- For child's emotions and behavior (survey on child's emotions and behavior (SDQ Japanese version), among the 1,316 valid responses, 176 (13.4%) were 16 points<sup>1</sup> and above and 89 (6.8%) were 20 points<sup>2</sup> and above (Fig. 5). The average total points were 8.7 points. For boys, among the 652 valid responses, 103 (15.8%) were 16 points and above and 49 (7.5%) were 20 points and above. For girls, among the 664 valid responses, 73 (11.0%) were 16 points and above and 40 (6.0%) were 20 points and above (Fig. 6). The average total score for boys was 9.3 points while the total score for girls was 8.1.
- 2) Regarding whether children have any issues in one or more areas regarding emotions, focus, behavior or interaction with others, those who answered 'no' were 926 (69.4%), 'yes (minor issues)' were 300 (22.5%), 'yes (clear issues)' were 70 (5.2%), and 'yes (serious issues)' were 39 (2.9%).
- 3) Among those that answered 'yes' for 2), regarding whether or not their child is confused or concerned of the issue, those that answered 'not at all' were 65 (16.6%), 'only a little' were 267 (68.3%), 'very' were 41 (10.5%)), and 'greatly' were 18 (4.6%).







- 1) 16 points: A standard value indicated by previous research
- 2) 20 points: A standard established by doctors, etc. from Fukushima Medical University to provide support.

#### Results for the FY 2013 Mental Health and Lifestyle Survey (For the general public)

Among the 185,859 people for the survey regarding mental health and lifestyle habits (for the general public), there were 27,598 (14.8%) valid responses. The breakdown was 12,317 (44.6%) males and 15,281 (55.4%) girls with an average age of 60.4 years old.

As for the current address, 21,489 (78.8%) lived within the prefecture and 5,766 (21.2%) lived outside the prefecture.

#### 1. Health condition (Q1)

The ratios for the health condition were: 834 (3.5%) for 'Very good'; 3,757 (15.8%) for 'good'; 14,528 (61.1%) for 'normal'; 4,229 (17.8%) for 'bad'; and 423 (1.8%) for 'very bad'.

#### 2. Height and weight (Q2)

The average height/weight of males was: 165.8cm/66.4kg and the average BMI was 24.1 kg/m<sup>2</sup>.

Among males, those with less than BMI 18.5 kg/m<sup>2</sup> were 407 (3.6%); 18.5 kg/m<sup>2</sup> and above and less than 30 kg/m<sup>2</sup> were 10,206 (91.1%); 30 kg/m<sup>2</sup> and above and less than 40 kg/m<sup>2</sup> were 556 (5.0%); and 40 kg/m<sup>2</sup> and above were 31 (0.3%).

The average height/weight of females was 153.2 cm/54.4kg and the average BMI was 23.2 kg/m<sup>2</sup>.

For females, those with a BMI less than  $18.5 \text{ kg/m}^2$  were 1,086 (8.1%);  $18.5 \text{ kg/m}^2$  and above and less than  $30 \text{ kg/m}^2$  were 11,613 (86.6%);  $30 \text{ kg/m}^2$  and above and less than  $40 \text{ kg/m}^2$  were 654 (4.9%); and  $40 \text{ kg/m}^2$  and above were 50 (0.4%).

2) For body weight change (did you have any body weight change compared to last year?), those who answered 'it increased by 3kg or more' were 4,882 (18.6%); 'it didn't change (±3kg)' were 18,718 (71.5%); and 'it decreased by 3kg or more' were 2,594 (9.9%). For body weight change for males, those who answered 'it increased by 3kg or more' were 2,047 (17.4%); 'it didn't change (±3kg)' were 8,531 (72.6%); and 'it decreased by 3kg or more' were 1,171 (10.0%).

For body weight change for females, those who answered 'it increased by 3kg or more' were 2,835 (19.6%); 'it didn't change ( $\pm$ 3kg)' were 10,187 (70.5%); and 'it decreased by 3kg or more' were 1,423 (9.9%).

# 3. Medical history (Q3)

Medical history (Have you ever been diagnosed with some of the following diseases?) is as shown below in Table 17:

The breakdown (multiple answers) of diagnosed diseases within the past year is shown in Table 18 (next page). 5,435 individuals answered 'no disease'.

Name of illness	Number of valid	Diagnosis		attending	ently g hospital patient
	responses	No	Yes	Yes	No
Hypertension	26 220	14,914	11,424	10,119	1,100
(Or high blood pressure)	26,338	(56.6%)	(43.4%)	(90.2%)	(9.8%)
Diabetes	25,823	22,144	3,679	3,104	467
(Or high blood sugar)	25,825	(85.8%)	(14.2%)	(86.9%)	(13.1%)
Hyperlipidemia	25,881	16,701	9,180	6,094	2,769
(Or has high cholesterol or neutral fat)	23,001	(64.5%)	(35.5%)	(68.8%)	(31.2%)
Mental disorder	25,975	22,994	2,981	2,168	697*
	20,770	(88.5%)	(11.5%)	(75.7%)	(24.3%)
Cancer	26,299	24,610	1,689		
(Including leukemia and lymphoma)	ncluding leukemia and lymphoma)	(93.6%)	(6.4%)		
Stroke	Stroke 26,203 25,	25,006	1,197		
		(95.4%)	(4.6%)		
(Types of stroke) Multiple answers Cerebral infarction Cerebral hemorrhage Subarachnoid hemorrhage Other I don't know			878 141 120 29 25		
Heart disease	26,327	22,837 (86.7%)	3,490 (13.3%)		
(Types of heart disease) Multiple answers Myocardial infarction Angina Arrhythmia Other I don't know Chronic hepatitis	26,398	25,873	422 977 1,823 471 164 525		
(Types of chronic hepatitis) Multiple		(98.0%)	(2.0%)		
answers Hepatitis B Hepatitis C Other			147 175 119		
Pneumonia	0.4.175	25,525	945		
(in the past decade)	26,470	(96.4%)	(3.6%)		

Table 17 Experience of diagnoses by general illness and the state of attending hospital asoutpatient (Upper row is the number of individuals/lower row is ratio)

\* Among these, 338 individuals answered that they "are not currently attending hospital as outpatient

since they have recovered".

Table 17 (continuation) Experience of diagnoses by general illness and the state of attending hospital as outpatient (Upper row is the number of individuals/lower row is ratio)

Name of illness	Number of valid	Diagnosis		
Name of inness	responses	No	Yes	
Bone fracture among 50 year olds and above		17,098	2,360	
(Collected responses from 50 year olds and above at the time of filling out the questionnaire)	19,458	(87.9%)	(12.1%)	
Thyroid disease	26.206	25,292	1,014	
	26,306	(96.1%)	(3.9%)	
(Types of thyroid disease) Multiple answers Hyperthyroidism (Basedow disease)			245	
Hypothyroidism			354	
Other			207	

Table 18 Diagnosed disease in the past year

Disease	Count
Hypertension	8,080
Diabetes	2,578
Hyperlipidemia	3,666
Mental disorder	1,420
Cancer	811
Stroke	380
Heart disease	1,957
Chronic hepatitis	284
Pneumonia	414
Bone fracture*	960
Thyroid disease	561

(Multiple answers)

\* Collected responses from individuals 50 years old and above at the time of filling out the questionnaire

### 4. Medical exam experience (Q4)

- 1) Those who answered 'no' for experience of CT scans were 13,265 (49.8%), 'yes' were 12,439 (46.7%), and 'I don't know' were 958 (3.6%).
- Those who answered 'no' for experience of examinations using X-rays (excluding CT and X-ray examination) were 10,863 (41.2%), 'yes' were 14,952 (56.7%) and 'I don't know' were 567 (2.1%).
- 3) For the question whether they experienced angiography, nuclear medicine scan or PET scan those who answered 'no' were 21,368 (81.4%); 'yes' were 3,595 (13.7%); and 'I don't know' were 1,295 (4.9%).

Among those who answered 'yes', 2,432 had an angiography; 286 had a nuclear medicine scan; and 888 had a PET scan.

# 5. Experience of radiation therapy treatment (Q5)

For experience of radiation therapy treatment, those who answered 'no' were 24,743 (93.1%), 'yes' were 1,237 (4.7%)and 'I don't know' were 584 (2.2%).

# 6. Daily living functions (Q6)

1) Daily living functions (tell us if you can do the following tasks on your own) are as shown below in Table 19.

	Yes	No	Number of
Daily life tasks			valid
			responses
1. Eating a meal without assistance (does not	26,740 (98.8%)	328 (1.2%)	27,068
include the preparation of the meal)			27,008
2. Changing clothes without assistance	26,460 (98.1%)	517 (1.9%)	26,977
3. Going to the bathroom without assistance	26,586 (98.6%)	389 (1.4%)	26,975
4. Buying commodities from the store	25,390 (94.1%)	1,594 (5.9%)	26,984

 Table 19
 General daily living functions (Count (ratio))

For recreation activities (do you participate in recreational activities (karaoke, Japanese croquet, etc.) or local event (festivals etc.)?), those who answered 'no, barely' were 16,622 (62.0%); 'sometimes participate' were 7,738 (28.9%); and 'frequently participate' were 2,458 (9.2%).

# 7. Sleep (Q7)

- 1) The average sleeping time was 7 hours and 2 minutes.
- 2) As for sleep satisfaction, those who answered 'satisfied' were 9,163 (39.4%); 'slightly dissatisfied' were 10,378 (44.7%); 'very dissatisfied' were 3,048 (13.1%); and 'extremely dissatisfied or couldn't sleep at all" were 652 (2.8%).
- 3) Experiences related to sleep (have you experienced the following at least 3 times a week?) are shown below in Table 20.

For
the
general
public

	Yes	No	Number of
			valid
			responses
1. It takes time to fall sleep at night after going to	10,466	13,291	23,757
bed.	(44.1%)	(55.9%)	23,131
2. I wake up during the night in the middle of sleep	16,015	7,887	23,902
	(67.0%)	(33.0%)	25,902
3. I wake up before the time I set and can't go back	9,832	13,592	23 121
to sleep.	(42.0%)	(58.0%)	23,424
4. I don't get enough total sleep.	8,290	14,712	23,002
	(36.0%)	(64.0%)	
5. I feel tired during the day.	6,492	16,326	22 010
	(28.5%)	(71.5%)	22,818
6. My physical and mental activity levels during the	7,165	15,884	22 040
day are low.	(31.1%)	(68.9%)	23,049
7. I feel sleepy during the day.	11,442	11,920	73 367
	(49.0%)	(51.0%)	23,362

Table 20 Experiences related to sleep in general (count (ratio))

### 8. Exercise (Q8)

For exercise, those who answered 'almost every day' were 4,325 (16.0%); '2-4 times per week' were 6,467 (23.9%); 'once a week' were 4,169 (15.4%); and 'almost never' were 12,143 (44.8%).

### 9. Opportunities to laugh (Q9)

As for opportunities to laugh (how often do you laugh out loud in your daily life?), those who answered 'almost every day' were 7,057 (26.0%); 'around 1-5 times per week' were 10,972 (40.5%); 'around 1-3 times per month' were 5,371 (19.8%); 'rarely' were 3,722 (13.7%).

#### 10. Smoking (Q10)

- For second-hand smoking (have you ever experienced second-hand smoking at home or at work in the past decade?), those who answered 'every day' were 5,346 (20.6%); 'around 4-5 times per week' were 1,621 (6.2%); 'sometimes' were 7,283 (28.0%); and 'rarely' were 11,739 (45.2%).
- For smoking before the earthquake disaster (have you smoked before the earthquake disaster on Mar 11<sup>th</sup> 2011?), those who answered 'no' were 17,783 (70.5%) and 'yes' were 7,428 (29.5%).
- 3) As for smoking (do you smoke (tobacco or cigarettes)? this excludes cigars and pipes), those who answered 'never' were 13,688 (58.4%); 'I quit' were 5,648 (24.1%); and 'I smoke' were 4,085 (17.4%).

For those who responded 'I smoke', the average number of cigarettes was 22.1 per day and the average time period of smoking was 29.0 years.

# 11. Alcohol consumption (Q11)

- For alcohol consumption prior to the earthquake disaster, those who answered 'No or barely drink (less than once a month)' were 13,530 (52.9%); 'Yes (at least once a month)' were 12,053 (47.1%).
- For alcohol consumption (do you currently drink alcohol?), those who answered 'No or barely drink (less than once a month)' were 13,174 (53.0%); 'I quit' were 839 (3.4%); and 'Yes (at least once a month)' were 10,841 (43.6%).
- 3) Among those who answered 'yes (at least once per month)', those who answered '0 times per week' were 42 (0.4%); 'once a week' were 1,628 (15.8%); 'twice a week' were 976 (9.5%); 'three times a week' were 1,024 (10.0%); '4 times a week' were 632 (6.1%); '5 times a week' were 1,182 (11.5%); '6 times a week' were 1,286 (12.5%); and '7 times a week' were 3,517 (34.2%).
- 4) The average alcohol consumption per day was around 1.0 go per day in terms of Japanese sake. Among the 24,854 valid responses for alcohol consumption (Q11-2), 1,962 (7.9%) consumed a large quantity of alcohol (2 go and above in terms of Japanese sake).
- 5) For experience related to alcohol consumption (answer the following questions based on the past 30 days (CAGE: Alcohol dependence standard)), the responses of each items are shown in Table 21 (next page) below. 'Yes' was 1 point and the total points of the 4 items were calculated.

The results by age group are shown in Table 22 (next page) and overall, 0 points were 5,972 (59.9%); 1 point were 2,348 (23.6%); 2 points were 987 9.9%); 3 points were 491 (4.9%);and 4 points were 164 (1.6%).

For males, 0 points were 3,525 (53.4%); 1 point were 1,775 (26.9%); 2 points were 763 (11.6%); 3 points were 401 (6.1%); and 4 points were 132 (2.0%). For females, 0 points were 2,447 (72.7%); 1 point were 573 (17.0%); 2 points were 224 (6.7%); 3 points were 90 (2.7%); and 4 points were 32 (1.0%).

				Number
		No	Yes	of valid
				responses
1	Have you ever felt that you must cut down your	6,798	3,261	10,059
	alcohol consumption?	(67.6%)	(32.4%)	
2	Have you ever been annoyed by others criticizing	9,024	987	10,011
	your drinking habits?	(90.1%)	(9.9%)	
3	Have you ever felt bad or sorry for your drinking	8,684	1,347	10,031
5	habits?	(86.6%)	(13.4%)	
4	Have you had a "hair of the dog" drink in order to	9,079	946	10,025
4	calm your senses or to cure a hangover?	(90.6%)	(9.4%)	

Table 21 Experience related to alcohol consumption (Upper row is the number of individuals/lower row is ratio)

Since there are missing values for each item, totals may not match.

Table 22 Experience related to alcohol consumption by age group (Upper row is the number of individuals/lower row is ratio)

	0 points	1 point	2 points	3 points	4 points	Number of valid responses
20s	303	58	32	14	1	408
203	(74.3%)	(14.2%)	(7.8%)	(3.4%)	(0.2%)	
30s	738	215	101	60	20	1,134
508	(65.1%)	(19.0%)	(8.9%)	(5.3%)	(1.8%)	1,101
40-	761	265	131	57	20	1,234
40s	(61.7%)	(21.5%)	(10.6%)	(4.6%)	(1.6%)	1,201
500	996	449	190	88	37	1,760
50s	(56.6%)	(25.5%)	(10.8%)	(5.0%)	(2.1%)	1,700
60-	1,747	751	305	174	58	3,035
60s	(57.6%)	(24.7%)	(10.0%)	(5.7%)	(1.9%)	5,055
70s and	1,427	610	228	98	28	2,391
above	(59.7%)	(25.5%)	(9.5%)	(4.1%)	(1.2%)	2,071
Orverte <sup>11</sup>	5,972	2,348	987	491	164	9,962
Overall	(59.9%)	(23.6%)	(9.9%)	(4.9%)	(1.6%)	,,,02

#### 12. Diet (Q12)

The frequency of consuming food (drinks), breakfast, eating, and pre-cooked food were as shown in Table 23 (next page).

		I don't eat	Less than once a	1-2 times a	3-4 times a	5-6 times a	Everyday	Total
			week	week	week	week		
Break	tfast	1,124	256	572	857	958	22,902	26,669
		(4.2%)	(1.0%)	(2.1%)	(3.2%)	(3.6%)	(85.9%)	04 (00
Eating	g out	7,151	10,889	4,098	880	344	1,320	24,682
D	1 1 0 1	(29.0%)	(44.1%)	(16.6%)	(3.6%)	(1.4%)	(5.3%)	25 216
Pre-co	ooked foods	3,770 (15.0%)	8,146 (32.3%)	7,401 (29.4%)	3,491 (13.8%)	1,059 (4.2%)	1,349 (5.3%)	25,216
		(13.0%)	(32.370)	(29.470)	(13.8%)	(4.270)	(3.3%)	
Cook	ed rice	240 (0.9%)	180 (0.7%)	466 (1.7%)	1,436 (5.4%)	2,378 (8.9%)	22,023 (82.4%)	26,723
Bread	1	2,811	7,469	6,150	2,998	1,235	3,967	24,630
		(11.4%)	(30.3%)	(25.0%)	(12.2%)	(5.0%)	(16.1%)	
Fish c	lishes	422 (1.6%)	2,684 (10.4%)	8,264 (31.9%)	8,654 (33.4%)	2,546 (9.8%)	3,362 (13.0%)	25,932
	Chicken	1,684	7,068	10,665	4,662	676	481	25,236
	Chicken	(6.7%)	(28.0%)	(42.3%)	(18.5%)	(2.7%)	(1.9%)	20,200
$\leq$	Beef, pork	986	4,680	10,965	7,417	1,180	682	25,910
Meat	Deer, poin	(3.8%)	(18.1%)	(42.3%)	(28.6%)	(4.6%)	(2.6%)	,
	Ham, sausage	2,812	9,078	8,284	3,452	758	771	25,155
		(11.2%)	(36.1%)	(32.9%)	(13.7%)	(3.0%)	(3.1%)	
	Green vegetables	466	2,419	5,976	7,080	3,833	6,609	26,383
		(1.8%)	(9.2%)	(22.7%)	(26.8%)	(14.5%)	(25.1%)	
Ve	Red and yellow	456	2,998	6,762	7,412	3,785	4,892	26,305
get		(1.7%)	(11.4%)	(25.7%)	(28.2%)	(14.4%)	(18.6%)	
Vegetables	Hypochromic	278	1,551	4,892	7,969	4,905	6,684	26,279
š		(1.1%)	(5.9%)	(18.6%)	(30.3%)	(18.7%)	(25.4%)	
	Vegetable juice	11,098	6,624	3,211	1,746	790	1,953	25,422
		(43.7%)	(26.1%)	(12.6%)	(6.9%)	(3.1%)	(7.7%)	06.240
щ	Fruits	1,647	4,469	5,256	4,762	2,838	7,368	26,340
Frui		(6.3%)	(17.0%)	(20.0%)	(18.1%) 1,657	(10.8%)	(28.0%)	25,099
its	Fruit juice	10,646 (42.4%)	7,526 (30.0%)	3,590 (14.3%)	(6.6%)	653 (2.6%)	1,027 (4.1%)	25,099
	Natto	2,567	4,850	6,666	5,130	2,508	4,533	26,254
	INALLO	(9.8%)	(18.5%)	(25.4%)	(19.5%)	(9.6%)	(17.3%)	20,204
	Miso soup	809	1,742	2,834	4,050	3,512	13,509	26,456
Soy bean	11130 30up	(3.1%)	(6.6%)	(10.7%)	(15.3%)	(13.3%)	(51.1%)	20,100
bea	Tofu dishes	791	4,295	7,878	7,057	3,184	3,038	26,243
an		(3.0%)	(16.4%)	(30.0%)	(26.9%)	(12.1%)	(11.6%)	,
	Boiled beans dish	6,784	10,000	4,968	2,205	806	879	25,642
		(26.5%)	(39.0%)	(19.4%)	(8.6%)	(3.1%)	(3.4%)	,
Milk		7,044	4,204	3,331	2,726	1,679	6,507	25,491
		(27.6%)	(16.5%)	(13.1%)	(10.7%)	(6.6%)	(25.5%)	
Soy n	nilk	17,838	3,805	1,274	792	415	965	25,089
		(71.1%)	(15.2%)	(5.1%)	(3.2%)	(1.7%)	(3.8%)	
Yogu	rt, fermented	3,722	4,376	4,359	3,708	2,397	8,033	26,595
milk (	drink	(14.0%)	(16.5%)	(16.4%)	(13.9%)	(9.0%)	(30.2%)	

Table 23Frequencies of eating (drinking) pre-cooked foods, breakfast and eating out for thegeneral public(Upper row is the number of individuals/lower row is ratio)

Since there are missing values for each item, totals may not match.

# 13. Overall mental health (Q13)

6,000

For overall mental health (K6), among the 22,836 valid responses, the number of those with 13 points\* and above was 2,349 (10.3%) (Fig. 7). The average points were 5.3 points. For males, among the 10,338 valid responses, the number of those with 13 points and above was 917 (8.9%). For females, among the 12,498 valid responses, 13 points and above were 1,432 (11.5%) (Fig. 8). The average points for males and females were 4.8 and 5.7 points respectively.

5,000 4,000 3,000 2,000 1,000 0 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 <u>15 16 17 18 19 20 21 22 23 24</u> Total score Number of individuals Fig. 7 The general mental state (K6): Overall 3,000 ■Male □Female 2,500 2,000 1,500 1,000 500 0 0 2 3 5 <u>12 13 14 15 16</u> 17 18 19 20 21 22 23 24 1 4 6 7 10 11 Total score Number of individuals

Table 24 (next page) shows this data by age group.



	13 points and	Number of valid
	above	responses
10s	20 (4.4%) 450	
20s	102 (9.7%)	1,053
30s	234 (9.7%)	2,411
40s	263 (10.9%)	2,415
50s	353 (10.5%)	3,369
60s	588 (9.4%)	6,249
70 and above	789 (11.5%)	6,889

Table 24 General mental health state (K6): by age group (count (ratio))

- \* 13 points : A standard value indicated by previous research
  - 2) For whether or not there were difficulties in daily life caused by experience/condition, those who answered 'not at all' were 13,883 (58.4%); 'just a little' were 5,730 (24.1%); 'sometimes' were 2,720 (11.4%); 'most of the time' were 642 (2.7%); and 'always' were 783 (3.3%).

### 14. Experiences during the disaster (Q14)

- 1) Experiences from the disaster (multiple answers) were: 'earthquake' for 24,692; 'tsunami' for 4,655; 'nuclear power plant accident' for 24,623; and 'none' for 239.
- 2) For whether or not one experienced a life-threatening event, those who answered 'yes' were 15,282 (60.9%) and 'no' were 9,794 (39.1%).

### 15. Traumatic response (Q15)

 Among the 22,718 valid responses, those who had 44 points\* and above for traumatic response (PCL) were 3,899 (17.2%) for (Fig. 9 (next page)). The average score was 31.0 points.

For males, among the 10,249 valid responses, 44 points and above were 1,625 (15.9%). For females, among the 12,469 valid responses, 44 points and above were 2,274 (18.2%) (Fig. 10 (next page)). The average points for males and females were 30.3 and 31.7 points, respectively.

The data based on age group is shown in table 25 (next page).

2) For whether or not there were difficulties in daily life due to such experience and condition, 'yes' were 5,360 (23.4%) and 'no' were 17,529 (76.6%).

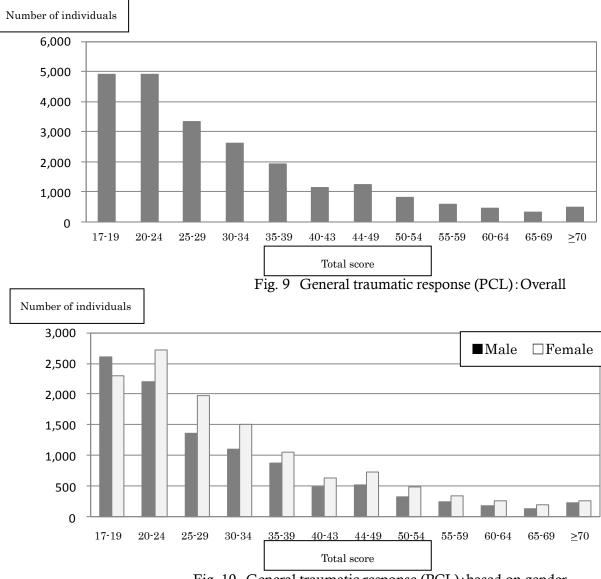


Fig. 10 General traumatic response (PCL): based on gender

Table 25	General traumatic response (PCL): by age group (count (ra	tio))

	44 points and	Number of valid
	above	responses
10s	17 (3.8%)	452
20s	108 (10.4%)	1,039
30s	275 (11.4%)	2,404
40s	344 (14.3%)	2,404
50s	480 (14.3%)	3,361
60s	988 (15.8%)	6,234
70s and above	1,687 (24.7%)	6,824

\* 44 points: a standard value indicated by previous research

#### 16. Difficulties in daily life (Q16)

The frequency of experiencing difficulties in daily life within the past month were: 1,039 (19.9%) for 'frequent'; 2,485 (47.6%) for 'sometimes'; 1,310 (25.1%) for 'rarely'; and 385 (7.4%) for 'never'.

The responses for 2)-4) targeted only those that answered 'frequent', 'sometimes' and 'rarely' for 1).

- The ratio for difficulties related to work, school and housework, etc. were: 165 (3.8%) for 'none'; 1,945 (44.6%) for 'slight'; 1,509 (34.6%) for 'moderate'; 418 (9.6%) for 'severe', and 322 (7.4%) for 'extremely severe'.
- The ratio for difficulties in human relations and spending days off were: 207 (4.6%) for 'none'; 1,815 (40.5%) for 'slight'; 1,612 (36.0%) for 'moderate'; 522 (11.7%) for 'severe'; and 323 (7.2%) for 'extremely severe'.
- 4) The ratio for difficulties in family communication and roles were: 367 (8.2%) for 'none';
  1,756 (39.4%) for 'slight'; 1,503 (33.8%) for 'moderate'; 500 (11.2%) for 'severe'; and 326 (7.3%) for 'extremely severe'.

### 17. Current living conditions (Q17)

- 1) For whether or not one had to live separately from family due to disaster, 10,480 (39.3%) answered 'yes' and 16,191 (60.7%) answered 'no'.
- 2) For the number of residents in one household (including self), the ratios before the disaster were: 1,914 (7.5%) for 'living alone'; 6,043 (23.8%) for '2 residents'; 5,037 (19.8%) for '3 residents'; 4,272 (16.8%) for '4 residents'; 3,058 (12.0%) for '5 residents'; 2,558 (10.1%) for '6 residents'; 1,566 (6.2%) for '7 residents'; 640 (2.5%) for '8 residents'196 (0.8%) for '9 residents'; and 128 (0.5%) for '10 residents and above'.

The current ratios were: 3,826 (14.6%) for 'living alone'; 9,776 (37.4%) for '2 residents'; 5,352 (20.5%) for '3 residents'; 3,485 (13.3%) for '4 residents'; 1,885 (7.2%) for '5 residents'; 1,040 (4.0%) for '6 residents'; 499 (1.9%) for '7 residents'; 160 (0.6%) for '8 residents'; 62 (0.2%) for '9 residents'; and 50 (0.2%) for '10 residents and above'.

- 3) For current residence, 8,302 (31.5%) lived in municipally subsidized rental housing; 4,168 (15.8%) in temporary housing; 256 (1.0%) in restoration public housing; 3,438 (13.0%) in rented houses/apartments; 540 (2.0%) in relative's houses; 8,843 (33.5%) in owned houses; and 833 (3.2%) in other kinds of habitats.
- 4) The number of times of moving since the disaster to present was: 0 times for 2,362 (9.3%);
  1 time for 2,585 (10.2%); 2 times for 3,247 (12.8%); 3 times for 4,334 (17.1%); 4 times for 4,183 (16.5%); and 5 times for 8,643 (34.1%).
- 5) For the form of employment: 6,437 (25.0%) were full-time/independent; 1,964 (7.6%) were part-time; and 17,321 (67.3%) were unemployed (including students and homemakers).
- 6) For the work situation (has your work situation changed due to the disaster and nuclear

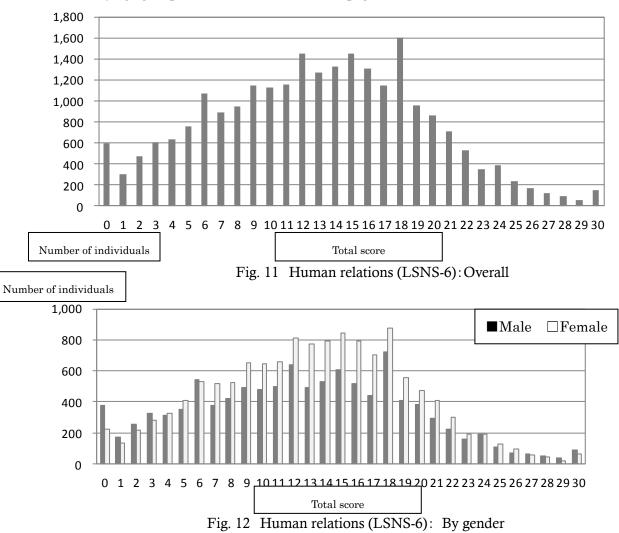
accident?) 11,455 (50.4%) said 'it changed' while 11,268 (49.6%) said 'it did not change'.

- 7) Among those who responded 'it changed', the details of this change (multiple answers) were: 1,318 for 'I started a new job'; 5,829 for 'I lost my job'; 1,434 for 'I changed my job'; 1,506 for 'My position changed within the same company/organization; and 2,007 for other.
- 8) For how one sees their financial circumstances; 3,569 (14.3%) said 'tough'; 6,350 (25.5%) said 'slightly tough'; 13,736 (55.2%) said 'normal'; 919 (3.7%) said 'slightly comfortable'; and 301 (1.2%) said 'comfortable'.

#### 18. Human relations (Q18)

For current human relations in daily life (LSNS-6), among the 23,886 valid responses, 9,727 (40.7%) had less than 12 points\* (Fig. 11). The average score was 12.9 points.

For males, among the 10,644 valid responses, 4,614 (43.3%) had less than 12 points. For females, among the 13,242 valid responses, 5,113 (38.6%) had less than 12 points (Fig. 12). The average score for males and females were 12.6 points and 13.2 points respectively.



The data by age group is shown in Table 26 (next page).

	Less than 12	12 points and	Number of valid			
		above	responses			
10s	137 (29.3%)	331 (70.7%)	468			
20s	449 (41.9%)	623 (58.1%)	1,072			
30s	1,239 (50.7%)	1,204 (49.3%)	2,443			
40s	1,395 (57.3%)	1,038 (42.7%)	2,433			
50s	1,783 (51.5%)	1,681 (48.5%)	3,464			
60s	2,578 (39.6%)	3,929 (60.4%)	6,507			
70s and above	2,146 (28.6%)	5,353 (71.4%)	7,499			

Table 26 Human relations (LSNS-6): by age group (count (ratio))

\* 12 points: A standard value indicated by previous research

# 19. Currently residing area (Q19)

The data for the currently residing area (please answer the following questions regarding the area you currently reside) is shown in Table 27.

		Strongly agree	Somewhat agree	Cannot say	Somewhat disagree	Strongly disagree	Number of valid responses
1	The people in this area help each other mutually.	2,592	9,645	8,919	2,584	2,542	26,282
1		(9.9%)	(36.7%)	(33.9%)	(9.8%)	(9.7%)	20,282
2	The people in this area can be	2,199	9,192	10,521	2,267	2,015	26 104
Z	trusted.	(8.4%)	(35.1%)	(40.2%)	(8.7%)	(7.7%)	26,194
3	The people in this are greet	4,682	13,373	5,545	1,645	1,141	26,386
3	each other.	(17.7%)	(50.7%)	(21.0%)	(6.2%)	(4.3%)	20,380
1	If there are issues in this area,	2,631	9,415	9,788	2,150	2,163	26 147
4	people join forces in order to create a solution.	(10.1%)	(36.0%)	(37.4%)	(8.2%)	(8.3%)	26,147

# 20. Awareness of health effects caused by radiation (Q20)

Awareness of health effects caused by radiation are shown in Table 28.

# Table 28 Awareness of health effects caused by radiation

(Upper row is the number of individuals/lower row is ratio)

		Possibility is very low	•		Possibility is very high	Number of valid responses
	How much health disorders (for example, cancer) do you think will occur in the	0,007	7,235	4,953	4,391	23,186
1	<sup>1</sup> future due to the current radiation exposure?	(28.5%)	(31.2%)	(21.4%)	(18.9%)	
2	How much health disorders do you think will occur in future generations (children		6,807	5,839	5,327	22,965
	or grandchildren) due to the current radiation exposure?	(21.7%)	(29.6%)	(25.4%)	(23.2%)	

# FY 2013 Fukushima Health Management Survey

# Mental Health and Lifestyle Survey

Data

			Count	Ratio
Gender	(1,281 valid responses)	• Boys	654	51.1%
(average age 2.0)		• Girls	627	48.9%
By address	(1,279 valid responses)	• Within the prefecture	910	71.1%
		• Outside the prefecture	369	28.9%
Q1 Health	(1,254 valid responses)	• Very good	415	33.1%
condition		• Good	533	42.5%
		• Normal	292	23.3%
		• Bad	14	1.1%
		• Very bad	0	0.0%
Q2 Height and wei	ght (by gender and age *	Listed in the main document)		-
Q3 Currently	(1,238 valid responses)	• No	917	74.1%
treated diseases		• Yes	321	25.9%
	(breakdown	*Listed in the main document)		
Q4 Experience of	(1,272 valid responses)	• No	982	77.2%
hospitalization		• Yes	290	22.8%
	(breakdown	*Listed in the main document)		
Q5 Medical exam	experience			
1) CT scan	(1,277 valid responses)	• No	1,192	93.3%
		• Yes	54	4.2%
		• I don't know	31	2.4%
2) Exam using	(1,258 valid responses)	• No	1,168	92.8%
X-rays		• Yes (*Examination	50	4.0%
		contents)		
		(fluoroscopy)	(38)	-
		(angiography)	(7)	-
		(nuclear medicine scan)	(2)	-
		• I don't know	40	3.2%
Q6 Experience of	(1,279 valid responses)	• No	1,251	97.8%
radiation therapy		• Yes	11	0.9%
		• I don't know	17	1.3%
Q7 Sleep time and	naps			
1) Sleep time	(1,227 valid responses)	• Average sleep hours: 10 h 0 r	nin	
	(1,234 valid responses)	• Average sleep time: 9:11 PM		
	(1,262 valid responses)	• Average wake-up time: 7:14	AM	
2) Naps	(1,272 valid responses)	• No	181	14.2%
		• Yes	1,091	85.8%

# Data from the FY 2013 Mental Health and Lifestyle Survey for the age group 0-3

Q8 Regular	(852 valid responses)	• Almost every day	370	43.4%
amount of		• 2-4 times a week	283	33.2%
exercise		• Once a week	110	12.9%
		• Rarely	89	10.4%
Q9 Diet				
1) Breast milk	(1,229 valid responses)	• Yes	193	15.7%
		• No	1,036	84.3%
2) Frequency of eating -		• Listed in the main document		-
Q10 Child rearing	(1,278 valid responses)	• Yes	161	12.6%
		• No	566	44.3%
		• Cannot say	551	43.1%

() indicates included numbers

			Count	Ratio
Gender	(1,565 valid responses)	• Boys	779	49.8%
(average age 4.8)		• Girls	786	50.2%
By address	(1,560 valid responses)	• Within the prefecture	1,053	67.5%
		• Outside the prefecture	507	32.5%
Q1 Health	(1,532 valid responses)	• Very good	404	26.4%
condition		• Good	651	42.5%
		• Normal	458	29.9%
		• Bad	779 786 1,053 507 404 651 458 16 3 978 531 1,103 443 1,103 443 1,411 96 47 1,406 84 (65) (9) (2) 50 1,509 1,509 14 30 5 min M 2 AM	1.0%
		• Very bad	779 786 1,053 507 404 651 458 16 3 978 531 1,103 443 1,103 443 1,411 96 47 1,406 84 (65) (9) (2) 50 1,509 14 30 543	0.2%
Q2 Height and wei	ght (by gender and age *	Listed in the main document)		-
Q3 Currently	(1,509 valid responses)	• No	978	64.8%
treated diseases		• Yes	531	35.2%
	(breakdown	*Listed in the main document)		
Q4 Experience of	(1,546 valid responses)	• No	1,103	71.3%
hospitalization		• Yes	443	28.7%
	(breakdown	*Listed in the main document)		
Q5 Medical exam	experience			
1) CT scan	(1,554 valid responses)	• No	1,411	90.8%
		• Yes	96	6.2%
		• I don't know	47	3.0%
2) Exam using	(1,540 valid responses)	• No	1,406	91.3%
X-rays		Yes (*Examination	84	5.5%
		contents)		
		(fluoroscopy)	(65)	-
		(angiography)	1,053 507 404 651 458 16 3 ) 978 531 t) 1,103 443 t) 1,103 443 t) 1,103 443 t) 1,401 84 47 1,406 84 (65) (9) (2) 50 1,509 14 30 h 46 min 0 PM 7:02 AM 1,002 543	-
		(nuclear medicine scan)	(2)	-
		• I don't know	50	3.2%
Q6 Experience of	(1,553 valid responses)	• No	1,509	97.2%
radiation therapy		• Yes	14	0.9%
		• I don't know	30	1.9%
Q7 Sleep time and	naps			
1) Sleep time	(1,493 valid responses)	• Average sleep hours: 9 h 46	min	
	(1,503 valid responses)	• Average sleep time: 9:10 PM	ſ	
	(1,535 valid responses)	• Average wake-up time: 7:02	AM	
2) Naps	(1,545 valid responses)	• No	1,002	64.9%
		• Yes	543	35.1%
	(427 valid responses)	(Average nap time 1h 39 min		

#### Data from the FY 2013 Mental Health and Lifestyle Survey for the age group 4-6

Data

Q8 Regular	(1,483 valid responses)	• Almost every day	612	41.3%
amount of		• 2-4 times a week	465	31.4%
exercise		• Once a week	189	12.7%
		• Rarely	217	14.6%
Q9 Diet				
Frequency of eati	ng -	• Listed in the main document		-
Q10 SDQ	(1,562 valid responses)	• Average total score 9.7 points		
1) SDQ	(778 valid responses)	• Male average total score 10.4 pc	ints	
	(784 valid responses)	• Female average total score 9.0 p	oints	
		• 16 points and above	224	14.3%
		(male)	(125)	-
		(female)	(99)	-
		• 20 points and above	89	5.7%
		(male)	(55)	-
		(female)	(34)	-
2) Presence or	(1,553 valid responses)	• No	1,156	74.4%
absence of		• Yes (slightly difficult)	324	20.9%
difficulties and		• Yes (clearly difficult)	63	4.1%
level		• Yes (critically difficult)	10	0.6%
3) Level of upset	(383 valid responses)	• Not at all	148	38.6%
		• A little	211	55.1%
		• Very	18	4.7%
		• Greatly	6	1.6%

() indicates included numbers

			Count	Ratio
Gender	(3,001 valid responses)	• Boys	1,528	50.9%
(average age 9.4)		• Girls	1,473	49.1%
Based on address	(2,995 valid responses)	• Within the prefecture	2,130	71.1%
		• Outside the prefecture	865	28.9%
Q1 Health	(2,876 valid responses)	• Very good	655	22.8%
condition		• Good	1,275	44.3%
		• Normal	906	31.5%
		• Bad	1,528         1,473         ure       2,130         ure       865         655         1,275         906         34         6         document)         1,881         986         ment)         1,929         982         ment)         2,470         368         137         2,606         1         118)         (29)         an)       (10)         151         2,868         28         71	1.2%
• Normal	6	0.2%		
Q2 Height and wei	ght (based on gender and	d age *Listed in the main docum	ent)	-
Q3 Currently	(2,867 valid responses)	• No	1,881	65.6%
treated diseases		• Yes	986	34.4%
	(breakdown	*Listed in the main document)		
Q4 Experience of	(2,911 valid responses)	• No	1,929	66.3%
hospitalization		• Yes	982	33.7%
	(breakdown	*Listed in the main document)		
Q5 Medical exam	experience			
1) CT scan	(2,975 valid responses)	• No	2,470	83.0%
		• Yes	368	12.4%
		• I don't know	137	4.6%
2) Examination	(2,933 valid responses)	• No	2,606	88.9%
using X-rays		Yes (*Examination	176	6.0%
		contents)		
		(fluoroscopy)	(118)	-
		(angiography)	(29)	-
		(nuclear medicine scan)	(10)	-
		• I don't know	151	5.1%
Q6 Experience of	(2,967 valid responses)	• No	2,868	96.7%
radiation therapy		• Yes	28	0.9%
		• I don't know	71	2.4%
Q7 Sleep time and	naps			
1) Sleep time	(2,896 valid responses)	• Average sleep hours: 8 h 5	5 min	
	(2,911 valid responses)	• Average sleep time: 9:29 P	M	
	(2,970 valid responses)	• Average wake-up time: 6:2	29 AM	
Q8 Regular	(2,829 valid responses)	• Almost every day	200	7.1%
amount of		• 2-4 times a week	764	27.0%

#### Data from the Mental Health and Lifestyle Survey for elementary school students

Data

exercise		• Once a week	722	25.5%
		• Rarely	1,143	40.4%
Q9 Diet				
Frequency of eati	ing -	• Listed in the main document	;	-
Q10 SDQ	(2,996 valid responses)	Average total score 9.4 point	s	
1) SDQ	(1,524 valid responses)	• Male average total score 9.9	points	
	(1,472 valid responses)	• Female average total score 8.	9 points	
		• 16 points and above	429	14.3%
		(male)	(245)	-
		(female)	(184)	-
		• 20 points and above	171	5.7%
		(male)	(108)	-
		(female)	(63)	-
2) Presence or	(2,987 valid responses)	• No	2,073	69.4%
absence of		• Yes (slightly difficult)	751	25.1%
difficulties and		• Yes (clearly difficult)	133	4.5%
level		• Yes (critically difficult)	30	1.0%
3) Level of upset	(883 valid responses)	• Not at all	221	25.0%
		• A little	581	65.8%
		• Very	66	7.5%
		• Greatly	1,143 tt ts points 429 (245) (184) 171 (108) (63) 2,073 751 133 30 221 581	1.7%

() indicates included numbers

Q1 Health       (861 valid responses)       • Very         condition       • Good       • Nor         condition       • Good       • Nor         Q2 Height and weight       (by gender and age *Listed       • Very         Q2 Height and weight       (by gender and age *Listed       • Very         Q3 Sleep       • Very       • Very         1) Sleep time       (653 valid responses)       • Ave         2) (recent) sleep       (868 valid responses)       • Slig         month       • Insu       • Slig         q4 Regular       (871 valid responses)       • Alm         amount of       • 2-4 m       • Ond         Q5 Diet       •       • List         Q6 Experience at       Multiple answers       • Eard         disaster       • Tsu	s 685 hin the 1,031 ure side the 313 ure 7 good 262 d 264 mal 310 23 r bad 2 in the main document) rage sleep hours: 7 h 11 min	49.2% 50.8% 76.7% 23.3% 30.4% 30.7% 36.0% 2.7% 0.2%
By address(1,344 valid responses)· Wit prefect · Out prefectQ1 Health(861 valid responses)· Very conditionQ1 Health(861 valid responses)· Very · Out · Nor · Bad · VeryQ2 Height and weight(by gender and age *Listed Q3 Sleep· Very · Sligt month1) Sleep time(653 valid responses)· Ave · Sligt monthQ4 Regular(871 valid responses)· Alm · Alm amount ofQ5 Diet-· List · documQ6 Experience atMultiple answers · Tsundit	nin the 1,031 ure side the 313 ure 7 good 262 d 264 mal 310 23 7 bad 2 in the main document) rage sleep hours: 7 h 11 min icient 37	76.7% 23.3% 30.4% 30.7% 36.0% 2.7%
Q1 Health(861 valid responses)• VeryQ1 Health(861 valid responses)• Verycondition• Good• Nor• Badd• VeryQ2 Height and weight(by gender and age *ListedQ3 Sleep• Very1) Sleep time(653 valid responses)• Ave2) (recent) sleep(868 valid responses)• Sligmonth• InsuQ4 Regular(871 valid responses)• Almamount of• 2-4 teQ5 Diet• ListedQ6 Experience atMultiple answers• Eartdisaster• Multiple answers• Eartdisaster• Tsu	ure 313 ure 262 d 262 d 264 mal 310 23 v bad 2 in the main document) rage sleep hours: 7 h 11 min icient 37	23.3% 30.4% 30.7% 36.0% 2.7%
Q1 Health (861 valid responses) · Very condition · Goo · Nor · Bad · Very Q2 Height and weight (by gender and age *Listed Q3 Sleep 1) Sleep time (653 valid responses) · Ave 2) (recent) sleep (868 valid responses) · Suff for the past · Slig month · Insu Q4 Regular (871 valid responses) · Alm amount of · 2-4 texercise · Onco Rard Q5 Diet - · List docum Q6 Experience at Multiple answers · Eart disaster · Tsur	side the 313 ure 262 d 262 d 264 mal 310 23 bad 2 in the main document) rage sleep hours: 7 h 11 min icient 37	30.4% 30.7% 36.0% 2.7%
Q1 Health(861 valid responses)· Verycondition· Goodcondition· Good· Nor· Bad· Very· VeryQ2 Height and weight(by gender and age *ListedQ3 Sleep· Very1) Sleep time(653 valid responses)· Ave2) (recent) sleep(868 valid responses)· Sufffor the past· Slig· Sligmonth· InstQ4 Regular(871 valid responses)· Almamount of· 2-4· CondQ5 Diet-· ListQ6 Experience atMultiple answers· Earddisaster· Tsu· Tsu	rage sleep hours: 7 h 11 min icient 37	30.4% 30.7% 36.0% 2.7%
Q1 Health condition(861 valid responses)• Very God • Nor • Bad • VeryQ2 Height and weight(by gender and age *Listed (by gender and age *Listed Q3 SleepQ3 Sleep(653 valid responses)• Ave • Slig month1) Sleep time(653 valid responses)• Suff • Slig monthQ4 Regular(871 valid responses)• Alm • Alm amount ofQ5 Diet-• List • documQ6 Experience atMultiple answers• Eart • Tsur	r good 262 d 264 mal 310 23 r bad 2 in the main document) rage sleep hours: 7 h 11 min icient 37	30.7% 36.0% 2.7%
condition · Good · Nor · Bad · Very Q2 Height and weight (by gender and age *Listed Q3 Sleep 1) Sleep time (653 valid responses) · Ave 2) (recent) sleep (868 valid responses) · Suff for the past · Slig month · Insu Q4 Regular (871 valid responses) · Alm amount of · 2-4 f exercise · On c · Rard Q5 Diet - · List docum Q6 Experience at Multiple answers · Earl disaster · Tsur	d 264 mal 310 23 v bad 2 in the main document) rage sleep hours: 7 h 11 min icient 37	30.7% 36.0% 2.7%
<ul> <li>Nor</li> <li>Bad</li> <li>Very</li> <li>Q2 Height and weight (by gender and age *Listed</li> <li>Q3 Sleep</li> <li>1) Sleep time (653 valid responses) · Ave</li> <li>2) (recent) sleep (868 valid responses) · Suff</li> <li>for the past · Sligg</li> <li>month · Insu</li> <li>Q4 Regular (871 valid responses) · Alm</li> <li>amount of · 2.44</li> <li>exercise · Onc</li> <li>Ram</li> <li>Q5 Diet · List</li> <li>Q6 Experience at Multiple answers · Eard</li> <li>disaster · Tsur</li> </ul>	mal 310 23 7 bad 2 in the main document) rage sleep hours: 7 h 11 min icient 37	36.0% 2.7%
<ul> <li>Bad</li> <li>Very</li> <li>Q2 Height and weight (by gender and age *Listed</li> <li>Q3 Sleep</li> <li>1) Sleep time (653 valid responses) · Ave</li> <li>2) (recent) sleep (868 valid responses) · Suff</li> <li>for the past · Slig</li> <li>month · Insu</li> <li>Q4 Regular (871 valid responses) · Alm</li> <li>amount of · 2-4 m</li> <li>exercise · Onco</li> <li>Ram</li> <li>Q5 Diet - · List</li> <li>docum</li> <li>Q6 Experience at Multiple answers · Eard</li> <li>disaster · Tsur</li> </ul>	23       2       3	2.7%
Q2 Height and weight(by gender and age *ListedQ3 Sleep	y bad2in the main document)rage sleep hours: 7 h 11 minicient37	
Q2 Height and weight       (by gender and age *Listed         Q3 Sleep       .         1) Sleep time       (653 valid responses)       . Ave         2) (recent) sleep       (868 valid responses)       . Suff         for the past       .       . Slig         month       . Insu         Q4 Regular       (871 valid responses)       . Alm         amount of       .       .2-4 m         exercise       .       . Onc         Q5 Diet       -       . List         docum       .       .         Q6 Experience at       Multiple answers       . Eart         disaster       .       .	rage sleep hours: 7 h 11 min icient 37	- 0.2%
Q3 Sleep         1) Sleep time       (653 valid responses)       • Ave         2) (recent) sleep       (868 valid responses)       • Suff         for the past       • Slig         month       • Insu         Q4 Regular       (871 valid responses)       • Alm         amount of       • 2-4 r         exercise       • Onc         Q5 Diet       -       • List         docum       Q6 Experience at       Multiple answers       • Eart         disaster       • Tsu	rage sleep hours: 7 h 11 min icient 37	
1) Sleep time(653 valid responses)· Ave2) (recent) sleep(868 valid responses)· Sufffor the past· Sligimonth· InsuQ4 Regular(871 valid responses)· Almamount of· 2-4 monormoleexercise· OncoQ5 Diet-· ListdocumQ6 Experience atMultiple answers· Eartdisaster· Tsur	icient 37	
2) (recent) sleep (868 valid responses) · Suff for the past · Slig month · Insu Q4 Regular (871 valid responses) · Alm amount of · 2-4 exercise · On o Ram Q5 Diet - · List docum Q6 Experience at Multiple answers · Ear disaster · Tsur	icient 37	
for the past · Slig month · Insu Q4 Regular (871 valid responses) · Alm amount of · 2-4 f exercise · Onc Q5 Diet · · List docum Q6 Experience at Multiple answers · Eart disaster · Tsur		
month · Insu Q4 Regular (871 valid responses) · Alm amount of · 2-4 m exercise · Onc Q5 Diet - · List docum Q6 Experience at Multiple answers · Earn disaster · Tsur	ntly insufficient 40	43.0%
Q4 Regular       (871 valid responses)       • Alm         amount of       • 2-4 m         exercise       • Oncome         Q5 Diet       -         Q6 Experience at       Multiple answers         disaster       • Tsur		46.1%
amount of · 2-4 fexercise · On constraints · 2-4 fexercise · On constraints · 2-4 fexercise · On constraints · Carton · Rame · Carton · Rame · Carton · Cart	fficient 9	95 10.9%
exercise · Onco · Rare Q5 Diet - · List docum Q6 Experience at Multiple answers · Eart disaster · Tsur	ost every day 407	46.7%
Q5 Diet - · List docum Q6 Experience at Multiple answers · Ear disaster · Tsur	imes a week 124	4 14.2%
Q5 Diet - · List docum Q6 Experience at Multiple answers · Eart disaster · Tsur	e a week 62	2 7.1%
Q6 Experience at     Multiple answers     • Eart       disaster     • Tsur	ely 278	8 31.9%
Q6 Experience atMultiple answers• Eartdisaster• Tsur	ed in the main	-
disaster • Tsur	ent	
100	hquake 823	3 -
• Nuc	nami 114	4 -
	lear power plant 802	2 -
accide	nt	
• Nei	her 2	2 -
Q7 Currently (1,293 valid responses) • No	942	2 72.9%
treated diseases • Yes	351	1 27.1%
(breakdown *Listed in the main o	locument)	
Q8 Experience of (1,293 valid responses) • No	837	7 64.7%
hospitalization · Yes	450	6 35.3%
(breakdown *Listed in the main of	locument)	
Q9 Medical exam experience		
1) CT scan (1,312 valid responses) • No		2 80.9%

#### Data from the FY 2013 Mental Health and Lifestyle Survey for middle school students

Data

		• Yes	208	15.9%
		• I don't know	42	3.2%
2) Examination	(1,297 valid responses)	• No	1,156	89.1%
using X-rays		• Yes (*Examination	86	6.6%
		contents)		
		(fluoroscopy)	(61)	-
		(angiography)	(20)	-
		(nuclear medicine scan)	(2)	-
		• I don't know	55	4.2%
Q10 Experience	(1,308 valid responses)	• No	1,278	97.7%
of radiation		• Yes	7	0.5%
therapy		• I don't know	23	1.8%
Q11 SDQ	(1,316 valid responses)	• Average total score 8.7 poin	ts	
1) SDQ	(652 valid responses)	• Male average total score 9.3	points	
	(664 valid responses)	• Female average total score 8	3.1 points	
		• 16 points and above	176	13.4%
		(male)	(103)	-
		(female)	(73)	-
		• 20 points and above	89	6.8%
		(male)	(49)	-
		(female)	(40)	-
2) Presence or	(1,335 valid responses)	• No	926	69.4%
absence of		• Yes (slightly difficult)	300	22.5%
difficulties and		• Yes (clearly difficult)	70	5.2%
level		• Yes (critically difficult)	39	2.9%
3) Level of upset	(391 valid responses)	• Not at all	65	16.6%
		• A little	267	68.3%
		• Very	41	10.5%
		• 16 points and above	18	4.6%

() indicates included numbers

			Count	Ratio
Gender	(27,598 valid resp	oonses) · Boys	12,317	44.6%
(average age		• Girls	15,281	55.4%
60.4)				
By address	(27,255 valid resp	oonses) • Within the prefecture	21,489	78.8%
		• Outside the prefecture	5,766	21.2%
Q1 Health	(23,771 valid resp	oonses) • Very good	834	3.5%
condition		• Good	3,757	15.8%
		• Normal	14,528	61.1%
		• Bad	4,229	17.8%
		• Very bad	423	1.8%
Q2 Height and w	reight -	• Listed in the main document		-
Q3 Medical histo	ory -	• Listed in the main document		-
Q4 Medical exam	n experience			
1) CT scan	(26,662 valid	• No	13,265	49.8%
	responses)	• Yes	12,439	46.7%
		• I don't know	958	3.6%
2) Fluoroscopy	(26,382 valid	• No	10.863	41.2%
	responses)	• Yes	14,952	56.7%
		• I don't know	567	2.1%
3) Other	(26,258 valid	• No	21,368	81.4%
examinations	responses)			
		Yes (%Examination contents)	3,595	13.7%
		(angiography)	(2,432)	-
		(nuclear medicine scan)	(286)	-
		(PET scan)	(888)	-
		• I don't know	1,295	4.9%
Q5 Experience	(26,564 valid	• No	24,743	93.1%
of radiation	responses)	• Yes	1,237	4.7%
therapy		• I don't know	584	2.2%
Q6 Daily living f	unctions			
1) Daily living fu	nctions	• Listed in the main document		
2) Participation	(26,818 valid	• No, or rarely	16,622	62.0%
in recreational	responses)	• Sometimes	7,738	28.9%
activities		• Frequently	2,458	9.2%
Q7 Sleep				
1) Sleep time	(17,066 valid	• Average sleep hours: 7 h 2 min		

#### Data from the Mental Health and Lifestyle Survey for the general public

Data

	responses)			
2) (recent) sleep	(23,241 valid	• Sufficient	9,163	39.4%
for the past	responses)			
month		Slightly insufficient	10,378	44.7%
		• Very insufficient	3,048	13.1%
		• Greatly insufficient or couldn't get	652	2.8%
		any sleep		
3) Experience related to sleep		-Listed in main document		-
Q8 Exercise	(27,104 valid	• Almost every day	4,325	16.0%
	responses)	• 2-4 times a week	6,467	23.9%
		• Once a week	4,169	15.4%
		• Rarely	12,143	44.8%
Q9 Opportunity	(27,122 valid	• Every day	7,057	26.0%
to laugh	responses)	• 1-5 times per week	10.972	40.5%
		• 1-3 times per month	5,371	19.8%
		• Rarely	3,722	13.7%

() indicates included numbers

			Count	Ratio
Q10 Smoking				
1)Second-hand	(25,989 valid responses)	• Every day	5,346	20.6%
smoking		• 4-5 times per week	1,621	6.2%
		• Sometimes	7,283	28.0%
		• Rarely	11,739	45.2%
2) Smoking	(25,211 valid responses)	• No	17,783	70.5%
(before disaster)		• Yes	7,428	29.5%
3) Smoking	(23,421 valid responses)	• No	13,688	58.4%
		• I quit	5,648	24.1%
		• I smoke	4,085	17.4%
		(Average of 22.1 per day)		-
		(Average smoking years 29.0 years	urs)	-
Q11 Alcohol				
1) Alcohol	(25,583 valid	• No, or rarely	13,530	52.9%
consumption	responses)	• Yes (at least once a	12,053	47.1%
before disaster		month)		
2) Alcohol	(24,854 valid responses)	• No or rarely	13,174	53.0%
consumption		• I quit	839	3.4%
		• Yes (at least once a	10,841	43.6%
		month)		
	(type of alcohol and	d frequency *Listed in the main d	ocument)	-
3) Frequency of	(10,287 valid responses)	• Listed in the main		
consumption		document		
4) Daily alcohol	(9,680 valid responses)	• Average 1 go		
consumption				
5) Experiences	(9,962 valid responses)	• Listed in the main document		-
related to				
alcohol				
Q12 Diet	Multiple answers	• Listed in the main document		
Q13 Mental				
health state (K6)	(22,836 valid responses)	• Average score 5.3 points		
1) Mental health	(10,338 valid responses)	• Average male score 4.8 points		
state (K6)	(12,498 valid responses)	• Average female score 5.7 poin	ts	
		• 13 points and above	2,349	10.3%
		(male)	(917)	-
		(female)	(1,432)	-
	(by age group *Listed in the state of the st		-	_
	(by age group "Listed in th	ne main document)		-

Data

disabilities in		• A little	5,730	24.1%
daily life		• Sometimes	2,720	11.4%
		• Mostly	642	2.7%
		• Always	783	3.3%
Q14 The Great Ea	ast Japan Earthquake	-		
1) Disaster	Multiple answers	• Earthquake	24,692	-
experience		• Tsunami	4,655	-
		• Nuclear power plant	24,623	-
		accident		
		• None	239	-
2)	(25,076 valid responses)	• Yes	15,282	60.9%
Life-threatening		• No	9,794	39.1%
experience				
Q15 Traumatic				
response (PCL)	(22,718 valid responses)	Average score 31.0 points		
1) Traumatic	(10,249 valid responses)	Average male score 30.3		
response (PCL)		points		
	(12,469 valid responses)	Average female score 31.7		
		points		
		• 44 points and above	3,899	17.2%
		(male)	(1,625)	-
		(female)	(2,274)	-
	(B	y age group *Listed in the main	n document)	-
2) Difficulties in	(22,889 valid responses)	• Yes	5,360	23.4%
daily life		• No	17,529	76.6%
Q16 Difficulties				
in daily life		• Frequently	1,039	19.9%
(PCL)	(5,219 valid responses)	• Sometimes	2,485	47.6%
1) Frequency of		• Rarely	1,310	25.1%
difficulties in		• Never	385	7.4%
daily life				
2) Difficulties at	(4,359 valid responses)	• None	165	3.8%
work/school		• Slight	1,945	44.6%
		• Moderate	1,509	34.6%
		• Severe	418	9.6%
		• Very severe	322	7.4%
3) Difficulties in	(4,479 valid responses)	• None	207	4.6%
social life		• Slight	1,815	40.5%
		-	1,612	36.0%

		• Severe	522	11.7%
		• Very severe	323	7.2%
4) Level of	(4,452 valid responses)	• None	367	8.2%
difficulties in		• Slight	1,756	39.4%
family		• Moderate	1,503	33.8%
communication		• Severe	500	11.2%
and roles		• Very severe	326	7.3%
Q17 Current				
living conditions				
1) Living				
conditions with	(26,671 valid responses)	• Yes	10,480	39.3%
family		• No	16,191	60.7%
2) Number of	(25,412 valid responses)			
people within		• Alone	1,914	7.5%
household		• 2 people	6,043	23.8%
Before the		• More than 3 people	17,455	68.7%
disaster		Details are listed in the		
		main document.		
At present	(26,135 valid responses)	• Alone	3,826	14.6%
		• 2 people	9,776	37.4%
		• More than 3 people	12,533	48.0%
		Details are listed in the		
		main document.		
3) Current	(26,380 valid responses)	• Municipally subsidized		
residence		rental housing	8,302	31.5%
		• Temporary housing	4,168	15.8%
		• Restoration public housing	256	1.0%
		• Rented house/apartment	3,438	13.0%
		Relative's home	540	2.0%
		• Owned house	8,843	33.5%
		• Other	833	3.2%
4) Number of	(25,354 valid responses)	• None	2,362	9,3%
moves since the		• Once	2,585	10,2%
disaster		• Twice	3,247	12,8%
		• Three times	4,334	17,1%
		• Four times	4,183	16,5%
		• More than five times	8,643	34,1%

55

Data

employment		• Part-time	1,964	7.6%
		Unemployed (including	17,321	67.3%
		students and homemakers)		
6) Work	(22,723 valid responses)	• It changed	11,455	50.4%
situation	Multiple answers	• It didn't change	11,268	49.6%
7) Work changes		• Started a new job	1,318	-
		• Lost a job	5,829	-
		• Changed jobs	1,434	-
		• Position change	1,506	-
		• Other	2,007	-
8) Current	(24,875 valid responses)	• Tough	3,569	14,3%
financial		<ul> <li>Slightly tough</li> </ul>	6,350	25,5%
circumstances		• Normal	13,736	55.2%
		Slightly comfortable	919	3.7%
		• Comfortable	301	1.2%
Q18 Human	(23,886 valid responses)	• Average score		
relations	(10,644 valid responses)	12.9 points		
(LSNS-6)	(13,242 valid responses)	• Male average score		
		12.6 points		
		• Female average score		
		13.2 points		
		• Less than 12 points	9,727	40.7%
		(Male)	(4,614)	
		(Female)	(5,113)	
		(By age group *Listed in the		
		main document)		
Q19 Currently		• Listed in the main		
residing area		document		
Q20 Health		• Listed in the main		
effects of		document		
radiation				
Q21-24		• Omitted		

() indicates included numbers

FY 2014 <b>(Draft)</b> Fukushima Health M Mental Health and Questionnaire	Lifestyle	Survey
<ul> <li>( 〒963-0000</li> <li>Room 302, Idai Apartment</li> <li>1, Hikarigaoka, Fukushima city</li> </ul>	<i>,</i>	
I, Hikangaoka, Pukusinina ch		
	00X0X0>	
Enter the required items in the fields below. Please check $\checkmark$ in corresponding boxes.	Date of entry	y: MM/DD/2015
Child's name :		Sex : $_{1}\Box$ M $_{2}\Box$ F
Child's date of birth : MM/DD/YYYY		
Who will respond to the survey?		
1□Mother 2□Father )	3□Grandparents	₄□Other
Name of guardian : (Relationship : )		
(Change of mailing address) Please enter only mentioned above.	if mailing address	differs from the address
T       -       City, ward, city, ward, county	Ward, town, village	
Name of apartment/room number etc		
Contact information Phone number		
Home : ( ) –	(Name	e)
Cell :		

Fukushima Prefecture, Fukushima Medical University

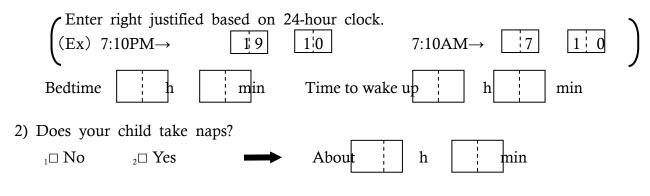
Please check  $\checkmark$  in the corresponding small boxes  $\Box$  below.

Q1. Describe your child's current health condition.

$_{1}\square$ Very good $_{2}\square$ Good $_{3}\square$ Normal $_{4}\square$ Bad $_{5}\square$ Very bad
Q2. Please enter your child's current height and weight. Example : Height 89.9cm weight 12.6kg (enter values right justified) Height 89.9 g cm Weight 12.6 kg
Height Weight Weight Q3. Is your child currently receiving treatment for (a) disease(s), etc.?
$_{1}\square$ No $_{2}\square$ Yes If so, please check $\checkmark$ in the corresponding boxes $\square$ .
1 Asthma (Infantile Asthma/bronchial asthma)       2 Allergic rhinitis       3 □ Atopic dermatitis         4 Allergic diseases other than 1       -       3 □ Common Cold         6 Influenza       -       3 □ Common Cold         7 Tympanitis       8 Nasal sinus/empyema       9 □         0 dontopathy (Cavities, braces, cleft lip and palate, etc.)       9 □       0         10 Epilepsy       11 □ ADHD (attention deficit hyperactivity)       12 □         12 □ Other (Specific name of disease)       -       -         12 □ No       2 □ Yes       -
If so, please check ✓ the corresponding boxes□.         □       Asthma (Infantile Asthma/bronchial asthma)       2       Pneumonia (acute/bronchial         pneumonia)       3       Mycoplasma pneumonia         4       Respiratory syncytial virus infection (Respiratory syncytial virus pneumonia)         6       Bronchitis (Acute bronchitis)         7       Influenza       8       Gastroenteritis (acute         gastroenteritis)       9       Rotavirus infection         10       Febrile convulsion       11       Kawasaki disease       12       Inguinal         hernia (hernia)       13       Other (Specific diseases)       ()

Q5. Below are questions regarding your child's sleeping habits

1) When does your child regularly sleep or wake up?



Q6. Below are questions for guardians who have a child aged 2 years or younger. How much does your child exercise?(Running around indoors, kicking balls, riding tricycles, etc.)

<sup>1</sup> Almost every day <sup>2</sup> Around 2-4 times per week

- $_{3}\square$  Once a week  $_{4}\square$  Almost never
- Q7. Below are questions regarding your child's diet.

#### 1) Does your child drink breast milk?

- $_{1}\Box$  Yes  $_{2}\Box$  No
- 2) Below are questions for guardians who have a child aged one year old or more
   Please check ✓ in corresponding boxes □ regarding your child's past month d iet.
- 1 Does your child eat seafood 3 days or more per week?  $\cdots$   $_{1}\square$  Yes  $_{2}\square$  No
- 2 Does your child eat food such as vegetables other than pickles, seaweed or mushrooms

almost every day?  $\cdots$   $_{1}\Box$  Yes  $_{2}\Box$  No

3 Does your child eat fruits almost every day?  $\cdots$  Yes

 $_2\square No$ 

④ Does your child eat soy products (Tofu, deep fried tofu, natto, boiled beans, etc.) almost

every day? · ·  $_{1}\Box$  Yes  $_{2}\Box$  No

 $\bigcirc$  Does your child eat dairy products (milk, yogurt, etc.) almost every day?.....  $_1\Box$ 

Yes  $_{2}\Box$  No

Q8. Are there ever times when you doubt your ability to raise a child?

 $_{1}\Box$  Yes  $_{2}\Box$  No  $_{3}\Box$  Cannot say



X If you have concerns regarding your child's health or comments regarding this survey, please describe them below.

Your comments will be used for references for future health management and surveys.

That is it for the questions.

Please enclose the questionnaire in a return envelope and send it by mail. Thank you for your cooperation.



 [Contact]
 O Exclusively for the Mental Health and Lifestyle Survey Radiation Medical Science Center, Fukushima Medical University

> Phone number: 024-549-5170 (9:00-17:00(with the exception of Dec 29-Jan 3 and weekends/holidays))

## FY 2014 **(Draft)** Fukushima Health Management Survey Mental Health and Lifestyle Survey Questionnaire (For ages 4-6)

〒963-0000	
Room 302, Idai Apartment	
1, Hikarigaoka, Fukushima city	
Taro Idai	
	OOXOXOX

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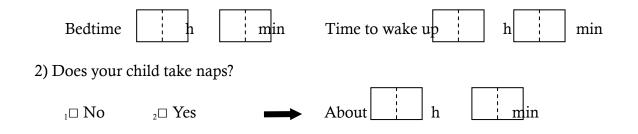
Enter the required items in the fields below. Please check ✓ in corresponding boxes□.	Date of entry : MM/DD/2015			
Child's name :		Sex : $_{1}\Box$ M $_{2}\Box$ F		

Who will resp	ond to the survey?			
₁□Mother	₂□Fa	ather	3 Grandparents	₄□Other
(		)		
Name		of	guardian	:
(Relationship	p:	)		
(Change of	mailing address)	Please enter if	your mailing address	differs from the address
	mentioned above.			
<u>−                                   </u>		City,	Ward,	
	Prefe	ward, county	town, village	
	cture			
Name of apar	tment/room numb	er etc		
Contact inform	nation			
Phone number	r ※The mental healt	h support team may	v contact you.	
Home : (	)	— _	(Name	)
Cell :				

Fukushima Prefecture, Fukushima Medical University

Please check  $\checkmark$  in the corresponding small boxes  $\Box$  below.

Q1. Describe your child's current health condition.  $_{1}\Box$  Very good  $_2\square$  Good <sub>3</sub>□ Normal ₅□ Very bad  $_{4}\square$  Bad Q2. Please enter your child's current height and weight. Example : Height 89.9cm, weight 12.6kg (enter values right justified) Height 1 1 6 6 cm Weight 3 kg  $2^{1}$ Heigh Weight kg cm Q3. Is your child currently receiving treatment for (a) disease(s), etc.?  $_{1}\square$  No <sub>2</sub>□ Yes If so, please check  $\checkmark$  in the corresponding boxes  $\Box$ . Asthma (Infantile Asthma/bronchial asthma)  $_{2}\square$  Allergic rhinitis <sup>3</sup><sup>□</sup> Atopic dermatitis  $\square$  Allergic diseases other than 1-3  $_{\rm F}$  Common Cold ₀□ Influenza ٩D  $_7\square$  Tympanitis  $_{\rm R}$  Nasal sinus/empyema Odontopathy (Cavities, braces, cleft lip and palate, etc.) ADHD (attention deficit hyperactivity)  $_{10} \square$  Epilepsy  $_{12}$  Other (Specific name of disease) ( Q4. Has your child been hospitalized due to an illness within this year?  $_{1}\square$  No  $_2\square$  Yes If so, please check  $\checkmark$  in the corresponding boxes  $\Box$ . Asthma (Infantile Asthma/bronchial asthma) <sup>2</sup> Pneumonia (acute/bronchial  $_{3}\square$  Mycoplasma pneumonia pneumonia)  $_{4}$  Respiratory syncytial virus infection (Respiratory syncytial virus pneumonia)  $_{5}$  $\Box$  Common cold  $_{6}\square$  Bronchitis (Acute bronchitis)  $_7\square$  Influenza <sup>a</sup> Gastroenteritis (acute  $_{\circ}\square$  Rotavirus infection gastroenteritis)  $_{10}$  Febrile convulsion  $_{11}$  Kawasaki disease  $_{12}$  Inguinal hernia (hernia)  $_{13}$  Other (Specific diseases) ( Q5. Below are questions regarding your child's sleeping habits. 1) When does your child regularly sleep or wake up? Enter right justified based on 24-hour clock. 7:10AM $\rightarrow$  7 (Ex) 7:10PM $\rightarrow$ 1:9 10 10



Q6. Below are questions for guardians who have a child aged 2 years or younger. How much does your child exercise?(Running around indoors, kicking balls, riding tricycles, etc.)

- <sup>1</sup><sup>□</sup> Almost every day <sup>2</sup><sup>□</sup> Around 2-4 times per week
- <sup>3</sup>□ Once a week <sup>4</sup>□ Almost never

Q7. Please check  $\checkmark$  in the corresponding boxes  $\Box$  below regarding your child's diet during the past month.

1) Does your child eat fast compared to others?  $1 \square$  Fast  $_2 \square$  Normal  $_3 \square$  Slow

- 2) Does your child drink beverages containing sugar (juice, soft drinks) every day?  $\Box$
- 3) Does your child eat seafood 3 days or more per week?  $\cdots \cdots \cdots \cdots _{1} \square$  Yes  $_{2} \square$  No

4) Does your child eat food such as vegetables other than pickles, seaweed or mushrooms almost every day?....  $_{1}\Box$  Yes  $_{2}\Box$  No

5) Does your child eat fruits almost every day?  $1 \square$  Yes  $2 \square$  No

6) Does your child eat soy products (Tofu, deep fried tofu, natto, boiled beans, etc.) almost every day?  $\cdot \cdot_{1}$  Yes  $_{2}$  No

7) Does your child eat dairy products (milk, yogurt, etc.) almost every day?....

- $_{1}\Box$  Yes  $_{2}\Box$  No
- No

Q8. For each question item below, please check the box "Does not apply", "Somewhat applies" or "Applies" (Ex: ☑). Even if you are unsure of your answer, or if you think the question is absurd, please make sure to answer all questions.

	) Please describe your child's behavior in the past 6 months.	Does not	Somewhat	Analiss
		apply	applies	Applies
1	My child is often considerate towards feelings of others.			
2	My child is restless and can't stay put for a long period of time.			
3	My child often complains of headaches, stomachaches and feeling			
	sick.			
4	My child often shares things (snacks, toys, pencils, etc.) with other			
	children.			
5	My child often gets angry or loses his/her temper.			
6	My child likes being alone and often plays alone.			
7	My child is obedient and usually listens to adults.			
8	My child has many concerns and always seems nervous.			
9	My child proactively helps others if somebody is hurt, depressed			
	or harassed.			
10	My child is always restless and fidgets often.			
11	My child has at least one close friend.			
12	My child has fights with or bullies other children often.			
13	My child often feels down or has tears in his/her eyes.			
14	My child is mostly liked by other children.			
15	My child has difficulty paying attention and cannot focus on one			
	thing.			
16	My child easily loses confidence, gets nervous, and hangs on my			
	arm when he or she is confronted with a new situation.			
17	My child is kind to younger children.			
18	My child often covers up the truth or lies.			
19	My child has been bullied or made fun of by other children.			
20	My child often helps others (parents, teachers, other children, etc.)			
	proactively.			
21	My child thinks thoroughly before taking action.			
22	My child often steals from home, school, and others.			
23	My child seems more comfortable with adults than spending time			
	with other children.			
24	My child is a coward and gets scared easily.			
25	My child finishes tasks to the end and has good focus.			

1) Please describe your child's behavior in the past 6 months.

2) Overall, do you think your child has any issues in one or more of the following areas: emotions, paying attention, behaviors or relationships with others?

3) Below are questions for guardians who responded "yes" above. Does your child worry or become upset about these issues?

Please proceed to 3)

 $_{1}\square$  Not at all  $_{2}\square$  Just a little  $_{3}\square$  Very  $_{4}\square$  Greatly

Q9. Does your child ever refuse to go to nursery school or kindergarten?

 $_1\square$  Yes  $_2\square$  No  $_3\square$  My child is currently not enrolled in nursery school or kindergarten.

X If you have any concerns regarding your child's health or comments regarding this survey, please describe them below. Your comments will be used for references for future health management and

surveys.

That is it for the questions.

Please enclose the questionnaire in a return envelope and sent it by mail.

Thank you for your cooperation.

	Please answer the questionnaire regarding the basic survey as well.
	Fukushima prefecture is conducting Fukushima Health Management Survey that aims to
	promote health of prefectural citizens at present and in the future. Have you submitted your
	child's basic survey questionnaire (the record of your child's behavior during the 4 months after
	the nuclear disaster)? (None of these responses will cause disadvantages to you or your child).
	$_{1}\Box$ Yes $_{2}\Box$ No $_{3}\Box$ I don't know
	Below are questions for those who answered "No" or "I don't know" above.
	Can we resend your child's basic survey questionnaire?
	$_{1}\Box$ Yes $_{2}\Box$ No
$\setminus$	

#### 8XXXXXXXXX

#### [Contact]



ふくしまから はじめよう。  O • Exclusively for the Mental Health and Lifestyle Survey Radiation Medical Science Center, Fukushima Medical University

Phone number: 024-549-5170

(9:00-17:00 (with the exception of Dec 29-Jan 3 and weekends/holidays))

# FY 2014 **(Draft)** Fukushima Health Management Survey Mental Health and Lifestyle Survey Questionnaire (For elementary school students)

Room 302, Idai Apartment 1, Hikarigaoka, Fukushima city

### Taro Idai

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ଚ

Enter the required iter Please check ✓ in cor			Date of entry : MM/DD/2015		
Child's name:				$Sex \stackrel{:}{\scriptstyle_1}\Box \mathbf{M}$	$_2\square$ F
Child's DOB : MM/	DD/YYYY				
Who will respond to t	he survey?				
₁□Mother (	₂□Father	)	3 Grandparents		4□Other
Signature (Relationship :	of )		guardian		:

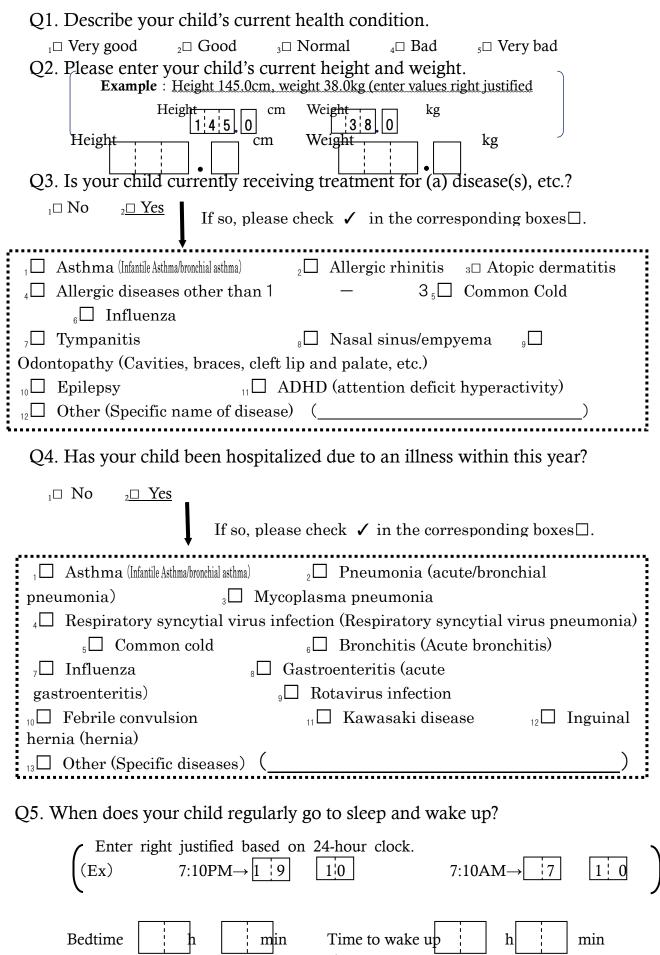
(Change	of mailing	address)	Please e	nter	if	your	mailing	address	differs	from	the	address
	mentione	ed above.										
╤	-			ty,			War	rd.				
	Prefe			ard,			tow	,				
	cture		CO	unty			villa	age				

Name of apartment/room number etc.

Contact informa	ation			
Phone number	ℜThe mental health	support team may contact	you.	
Home: (	)		(Name	)
Cell :				

## Fukushima Prefecture Fukushima Medical University

Please check  $\checkmark$  in the corresponding small boxes  $\Box$  below.



Q6. How much does your child exercise regularly aside from physical education classes (club activities, sport-related lessons, etc.)?

<sup>1</sup>□ Almost every day <sup>2</sup>□ Around 2-4 times per week <sup>3</sup>□ Once a week <sup>4</sup>□ Almost never

Q7. Please check  $\checkmark$  in the corresponding boxes  $\Box$  below regarding your child's diet during the past month.

1) Does your child eat fast compared to others? $1 \square$ Fast $_2 \square$ Normal $_3 \square$ Slow
2) Does your child skip breakfast often? $\Box_1 \square$ Yes $_2 \square$ No
3) Does your child drink beverages containing sugar (juice, soft drinks) every day? $\Box$
Yes ₂□ No
4) Does your child eat seafood 3 days or more per week? $1 \square$ Yes $2 \square$ No
5) Does your child eat food such as vegetables other than pickles, seaweed or mushrooms
almost every day? $\cdots$ 1 Yes 2 No
6) Does your child eat fruits almost every day? $\cdots$ $1 \square$ Yes $2 \square$
No
7) Does your child eat soy products (Tofu, deep fried tofu, natto, boiled beans, etc.) almost
every day? · · $_{1}\Box$ Yes $_{2}\Box$ No
8) Does your child eat dairy products (milk, yogurt, etc.) almost every day?
$_{1}\Box$ Yes $_{2}\Box$ No
9) Does your child eat pre-cooked food such as side dishes and boxed meal (including instant
food) almost every day? $\cdots$ No
10) Does your child eat out (including fast food) almost every day? $\cdots $ $_{1}\Box$ Yes $_{2}\Box$
No

Q8. For each question item below, please check the box "Does not apply", "Somewhat applies" or "Applies" (Ex: ☑). Even if you are unsure of your answer, or if you think the question is absurd, please make sure to answer all questions.

		Not applicable	Somewhat applicable	Applicable
1	My child is often considerate towards feelings of others.			
2	My child is restless and can't stay put for a long period of time.			
3	My child often complains of headaches, stomachaches and feeling			
	sick.			
4	My child often shares things (snacks, toys, pencils, etc.) with other			
	children.			
5	My child often gets angry or loses his/her temper.			
6	My child likes being alone and often plays alone.			
7	My child is obedient and usually listens to adults.			
8	My child has many concerns and always seems nervous.			
9	My child proactively helps others if somebody is hurt, depressed			
	or harassed.			
10	My child is always restless and fidgets often.			
11	My child has at least one close friend.			
12	My child has fights with or bullies other children often.			
13	My child often feels down or has tears in his/her eyes.			
14	My child is mostly liked by other children.			
15	My child has difficulty paying attention and cannot focus on one			
	thing.			
16	My child easily loses confidence, gets nervous, and hangs on my			
	arm when he or she is confronted with a new situation.			
17	My child is kind to younger children.			
18	My child often covers up the truth or lies.			
19	My child has been bullied or made fun of by other children.			
20	My child often helps others (parents, teachers, other children, etc.)			
	proactively.			
21	My child thinks thoroughly before taking action.			
22	My child often steals from home, school, and others.			
23	My child seems more comfortable with adults than spending time			
	with other children.			

1) Please describe your child's behavior in the past 6 months.

2)Overall, do you think your child has any issues in one or more of the following areas: emotions, paying attention, behaviors or relationships with others?

 $_{1}\square$  No  $_{2}\square$  Yes (small issues)  $_{3}\square$  Yes (clear issues)  $_{4}\square$  Yes (serious issues)

3) Below are questions for guardians who responded "yes" above. Does your child worry or become upset about these issues?
1□ Not at all 2□ Just a little 3□ Very 4□Greatly

Q9. Does your child ever refuse to go to school?

 $_1\Box$  Yes  $_2\Box$  No

X If you have any concerns regarding your child's health or comments regarding this survey, please describe them below.

Your comments will be used for references for future health management and surveys.

That is it for the questions.

Please enclose the questionnaire in a return envelope and send it by mail.

Thank you for your cooperation.

/	Please answer the questionnaire regarding the basic survey as well.				
Fukushima prefecture is conducting Fukushima Health Management Survey that aims promote health of prefectural citizens at present and in the future. Have you submitted you					
	the nuclear disaster)? (None of these responses will cause disadvantages to you or your child).				
	$_{1}\square$ Yes $_{2}\square$ No $_{3}\square$ I don't know				
	Below are questions for those who answered "No" or "I don't know" above.				
	Can we resend your child's basic survey questionnaire?				
	$_{1}\Box$ Yes $_{2}\Box$ No				
$\langle$					

#### [Contact]



ふくしまから はじめよう。

 O • Exclusively for the Mental Health and Lifestyle Survey Radiation Medical Science Center, Fukushima Medical University

Phone number: 024-549-5170

(9:00-17:00 (with the exception of Dec 29-Jan 3 and weekends/holidays))

### FY 2014

## (Draft)

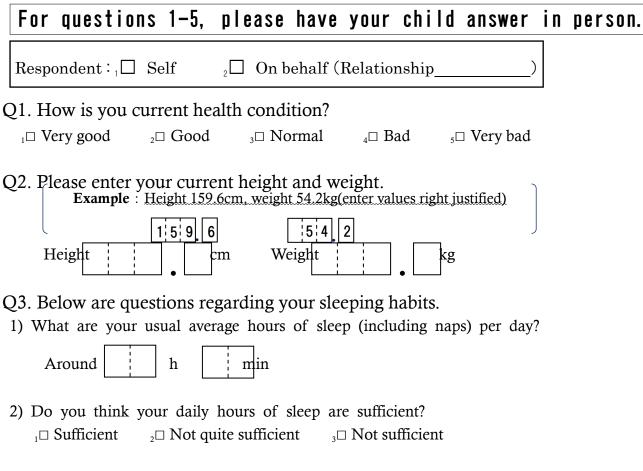
Fukushima Health Management Survey Mental Health and Lifestyle Survey

Questionnaire (For middle school students)

〒963-0000				
Room 302, Idai Ar	partment			
1, Hikarigaoka, F		city		
	Caro Id	lai		
		00X02	хох	P
Enter the required items in the fields below. Please check $\checkmark$ in corresponding boxes.	Date of entry : MM/DD/2015			
	I			
Child's name :			$Sex: {}_{\scriptscriptstyle 1}\Box M$	$_2\square F$
		-		
Child's DOB : MM/DD/YYYY				
Who will respond to the survey?				
<sup>1</sup> □Mother <sup>2</sup> □Father		3 Grandparents		₄□Other
(	)			
Signature of guardian (If you are a minor res	ponding to	o this survey, pleas	se have your guar	dian sign
for this study upon consent.)				
(Signature of guardian)			ionship :	)
(Change of mailing address) Please entomentioned above.	er if your	mailing address	differs from the	e address
〒 City,		Ward,		
Prefe ward cture coun		town, village		
Name of apartment/room number etc				
Phone number	n may conta	ct you.		
Home : ( )		(Name	2	)
Cell : — —	-			

Fukushima Prefecture, Fukushima Medical University

Please check  $\checkmark$  in the corresponding small boxes  $\Box$  below.



- Q4. How much do you exercise aside from physical education classes? (Including club activities, sport-related lessons, etc.)
  - $_1\Box$  Almost every day  $_2\Box$  2-4 times per week
  - $_{3}\Box$  Once a week  $_{4}\Box$  Almost never

Q5. Check  $\checkmark$  in the boxes  $\Box$  below that correspond to your diet during the past month.

1) Do you eat fast compared to others? $\Box$ Fast $_2\Box$ Normal $_3\Box$ Slow
2) Do you often skip breakfast? $1 \square$ Yes $2 \square$ No
3) Do you go to sleep within 1-2 hours after dinner? $1 \square$ Yes $2 \square$ No
4) Do you drink beverages that contain sugar (coffee, juice, soft drinks) almost every day?
$_{1}\Box$ Yes $_{2}\Box$ No
5)) Do you eat seafood 3 days or more per week? $1 \square$ Yes $2 \square$ No
6) Do you eat foods such as vegetables other than pickles, seaweed, and
mushrooms? $\cdots $ $_{1}\Box$ Yes $_{2}\Box$ No
7) Do you eat fruits almost every day? $1 \square$ Yes $_2 \square$ No
8) Do you eat soy products (Tofu, deep fried tofu, natto, boiled beans, etc.) almost every
day? · · $_{1}\Box$ Yes $_{2}\Box$ No
9) Do you eat dairy products (milk, yogurt, etc.) almost every day? $\cdots $ $_1\Box$ Yes $_2\Box$ No
10)Do you eat pre-cooked food such as side dishes and boxed meal (including instant food)
almost every day? $_{1}\square$ Yes $_{2}\square$ No
11) Do you eat out (including fast food) almost every day? $\cdots $ $_1\Box$ Yes $_2\Box$ No

X If you have any concerns regarding your health or comments regarding this survey, please describe them below. Your comments will be used for references for future health management and surveys.

That is it for the questions to you. Please give this questionnaire to your guardian. Thank you for your cooperation.

For the questions below, the **guardian** must respond on the child's behalf.

Q6. Is your child currently receiving treatment for (a) disease(s), etc.?

$_{1}\square$ No $_{2}\square$ Yes					
If so, please check $\checkmark$ the corresponding boxes $\Box$ .					
1 Asthma (Infantile Asthma/bronchial asthma) 2 Allergic rhinitis 3 Atopic dermatitis					
$_4\square$ Allergic diseases other than 1-3 $_5\square$ Common Cold $_6\square$					
Influenza					
$_7\square$ Tympanitis $_8\square$ Nasal sinus/empyema $_9\square$					
Odontopathy (Cavities, braces, cleft lip and palate, etc.)					
$_{10}$ Epilepsy $_{11}$ ADHD (attention deficit hyperactivity)					
$_{12}\square$ Other (Specific name of disease) ()					

Q7. Has your child been hospitalized due to an illness within this year?

$_{1}\square$ No $_{2}\square$ Yes			
	If so, please check $\checkmark$ in the corresponding boxes $\Box$ .		
$_1\square$ Asthma (Infantile Asthma/bronchial asthma) $_2\square$ Pneumonia (acute/bronchial			
pneumonia)	<sub>3</sub> Mycoplasma pneumonia		
$_{4}\square$ Respiratory sync	ytial virus infection (Respiratory syncytial virus pneumonia) $_{\scriptscriptstyle 5}$		
$\Box$ Common cold	$_{6}\square$ Bronchitis (Acute bronchitis)		
<sub>7</sub> □ Influenza	$_{\scriptscriptstyle 8}\Box$ Gastroenteritis (acute		
gastroenteritis)	$_{\circ}\square$ Rotavirus infection		

Q8. For each question item below, please check the box "Does not apply", "Somewhat applies" or "Applies" (Ex: ☑). Even if you are unsure of your answer, or if you think the question is absurd, please make sure to answer all questions.

	· · ·	Does not apply	Somewhat applies	Applies
1	My child is often considerate towards feelings of others.			
2	My child is restless and can't stay put for a long period of time.			
3	My child often complains of headaches, stomachaches and feeling sick.			
4	My child often shares things (snacks, toys, pencils, etc.) with other children.			
5	My child often gets angry or loses his/her temper.			
6	My child likes being alone and often plays alone.			
7	My child is obedient and usually listens to adults.			
8	My child has many concerns and always seems nervous.			
9	My child proactively helps others if somebody is hurt, depressed			
	or harassed.			
10	My child is always restless and fidgets often.			
11	My child has at least one close friend.			
12	My child has fights with or bullies other children often.			
13	My child often feels down or has tears in his/her eyes.			
14	My child is mostly liked by other children.			
15	My child has difficulty paying attention and cannot focus on one			
	thing.			
16	My child easily loses confidence, gets nervous, and hangs on my			
	arm when he or she is confronted with a new situation.			
17	My child is kind to younger children.			
18	My child often covers up the truth or lies.			
19	My child has been bullied or made fun of by other children.			
20	My child often helps others (parents, teachers, other children, etc.) proactively.			
21	My child thinks thoroughly before taking action.			
22	My child often steals from home, school, and others.			
23	My child seems more comfortable with adults than spending time			
	with other children.			
24	My child is a coward and gets scared easily.			
25	My child finishes tasks to the end and has good focus.			

1) Please describe your child's behavior in the past 6 months.

2) Overall, do you think your child has any issues in one or more of the following areas: emotions, paying attention, behaviors or relationships with others?

 $_{1}\square$ No  $_{2}\square$ Yes (small issues)  $_{3}\square$ Yes (clear issues)  $_{4}\square$ Yes (serious issues)

Please proceed to 3)

3) Below are questions for guardians who responded "yes" above. Does your child worry or become upset about these issues?

<sup>1</sup> Not at all <sup>2</sup> Just a little <sup>3</sup> Very <sup>4</sup> Greatly

Q9. Does your child ever refuse to go to school?

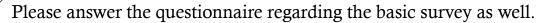
 $_1\square$  Yes  $_2\square$  No

X If you have any concerns regarding your child's health or comments regarding this survey, please describe them below.

Your comments will be used for references for future health management and surveys.

That is it for the questions. Please enclose the survey in a return envelope and send it by mail.

Thank you for your cooperation.



Fukushima prefecture is conducting Fukushima Health Management Survey that aims to promote health of prefectural citizens at present and in the future. Have you submitted your child's basic survey questionnaire (the record of your child's behavior during the 4 months after the nuclear disaster)? (None of these responses will cause disadvantages to you or your child).

 $_{1}\Box$  Yes  $_{2}\Box$  No  $_{3}\Box$  I don't know

Below are questions for those who answered "No" or "I don't know" above.

Can we resend your child's basic survey questionnaire?

 $_1\Box$  Yes  $_2\Box$  No



## [Contact]



ふくしまから はじめよう。 ○ ○ Exclusively for the Mental Health and Lifestyle Survey Radiation Medical Science Center, Fukushima Medical University

Phone number: 024-549-5170

(9:00-17:00 (with the exception of Dec 29-Jan 3 and weekends/holidays))

## FY 2014

## (Draft)

## Fukushima Health Management Survey Mental Health and Lifestyle Survey Questionnaire **(For the general public)**

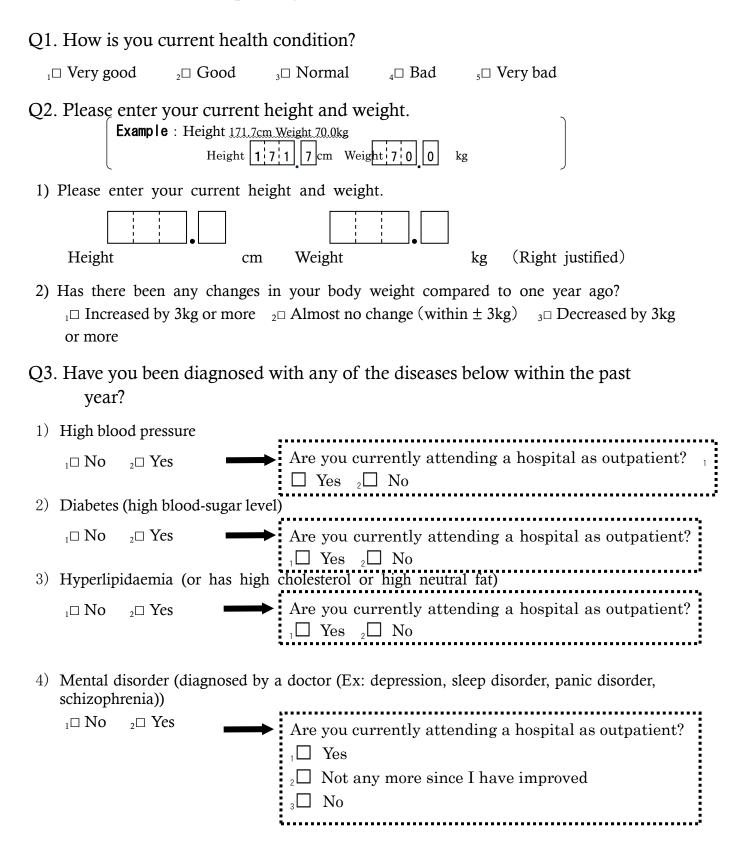
〒963-0000	
Room 302, Idai Apartment	
1, Hikarigaoka, Fukushima city	
Taro Idai	
	00X0X0X
•	

Enter the required items in the fields below. Please check  $\checkmark$  in corresponding boxes.

Date of entry : MM/DD/2015	Respondent : $_1\Box$ Self $_2\Box$ Representative(Relationship)
Name :	$\mathbf{Sex}: _{1}\Box \mathbf{M} _{2}\Box \mathbf{F}$
DOB : MM/DD/YYYY	
Signature of guardian (If you are a minor response for this study upon consent.)	onding to this survey, please have your guardian sign
(Signature of guardian)	(Relationship : )
(Change of mailing address) Please enter mentioned above.	if your mailing address differs from the address
$\overline{\tau}$ $\frac{City, ward, county}{Citye}$	Ward, town, village
Name of apartment/room number etc	
Contact information	
Phone number	nay contact you.
Home : ( )	· (Name )
Cell :	

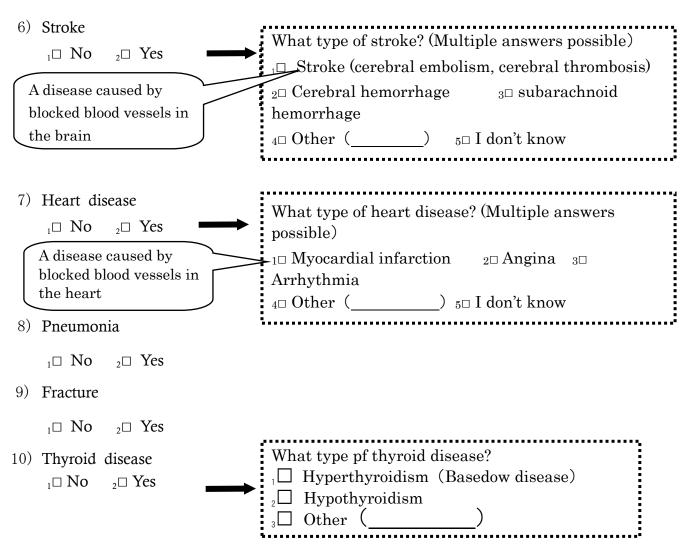
Fukushima Prefecture, Fukushima Medical University

Please check  $\checkmark$  in the corresponding small boxes  $\Box$  below.



5) Cancer (including leukemia and lymphoma)

 $_{1}\square$  No  $_{2}\square$  Yes



Q4. Below are questions regarding your sleeping habits.

1) (Including naps) what are your usual average hours of sleep per day? Around h mm

2) Are you satisfied with your quality of sleep (regardless of the length) during the past month?

 $_{1}\square$  Yes  $_{2}\square$  Not quite  $_{3}\square$  No  $_{4}\square$  Not at all, I didn't get any sleep

### 3) Have you experienced the items below at least 3 times a week?

		Yes	No
1	It takes time for me to fall asleep, even after I'm in bed	$_1\square$	2
2	I wake up during the night in the middle of sleep	$_1\square$	2
3	I wake up before the time I set and can't go back to sleep.	1	2
4	I don't get enough total sleep.	$_1\square$	2
5	I feel tired during the day.	1	2

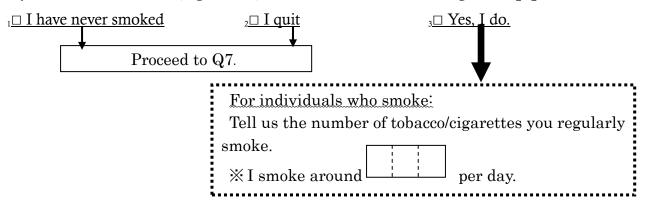
6	My daily physical and mental activity levels are low.	1	2
7	I feel sleepy during the day.	$_1\square$	2

- Q5. Do you exercise regularly?
  - $_1\Box$  Almost every day  $_2\Box$  2-4 times per week

 $_{3}\Box$  Once a week  $_{4}\Box$  Almost never

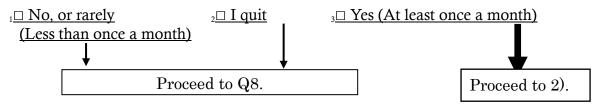
※ Questions 6 and 7 target adults only.
 <u>If you are a minor, proceed to Q8.</u>

Q6. Do you smoke tobacco (cigarettes)? These do not include cigars or pipes.



Q7. The questions below are regarding alcohol.

1) Do you currently drink alcohol?



2) How often do you drink alcohol?

Around

days per week

※Reference Japanese sake 1 go (0.18 liters) conversion chart

Beer/Sparkling liqu	ior 1	A 1	500m
middle bottle		About	1
5 Shochu highballs	1 long		500m
can			1
25% shochu	1 aun		100m
2370 SHOCHU	1 cup		1
Whisky	2 singles		60ml
Wine	2 glasses		240m

3) Please tell us your alcohol intake per day.

1

Amount converted to Japanese sake<sup>\*\*</sup>

Around	
Albunu	

go per day

4) The questions below are regarding your past 30 days.

		No	Yes
1	Have you ever thought that you should cut down your alcohol	1	2
1	intake?		
2	Have you ever been annoyed by others criticizing your drinking	$_1\square$	2
Z	habits?		
3	Have you ever felt bad or sorry for your drinking habits?	$_{1}\square$	2
4	Have you had a hair of the dog in order to calm your senses or to	1	2
4	cure a hangover?		

Q8. How frequently have you lost your appetite during the past two weeks?

 $_1\square$  Never  $_2\square$  Several days  $_3\square$  At least half of the time  $_4\square$  Almost every day

Q9. Check  $\checkmark$  in the boxes  $\Box$  below that correspond to your dietary habits during the past month.

<ul> <li>2) Do you every skip breakfast?</li></ul>
<ul> <li>4) Do you eat snacks during the day or night every day?</li></ul>
<ul> <li>Yes 2□ No</li> <li>5) Do you eat kinds of meat with a large amount of fat (ribs, ground meat, loins, processed meat) at least 3 days per week? 1□</li> <li>Yes 2□ No</li> </ul>
<ul> <li>5) Do you eat kinds of meat with a large amount of fat (ribs, ground meat, loins, processed meat) at least 3 days per week? ₁□</li> <li>Yes ₂□ No</li> </ul>
meat) at least 3 days per week? $\dots$ 1 Yes 2 No
Yes ₂□ No
-
6) Do you eat seafood at least 3 days per week? $1 \square Yes _2 \square No$
7) Do you have soup (including miso soup, etc.) at least 2 bowls a day? $\cdots $ $_{1}\Box$
Yes <sub>2</sub> No
8) Do you eat pickles at least twice a day? $\Box$ Yes

 $_{\scriptscriptstyle 2}\square \ No$ 

9) Do you eat vegetables other than pickles, seaweed, and mushrooms for almost every
meal? $\Box$ Yes $_2\Box$ No
10) Do you eat fruits almost every day? $\cdots$ Yes
₂□ No
11) Do you eat soy products (Tofu, deep fried tofu, natto, boiled beans, etc.) almost every
day? $\cdot \cdot$ 2 No
12) Do you eat dairy products (milk, yogurt, etc.) almost every day? $\cdots $ $_{1}\Box$ Yes
₂□ No
13) Do you eat pre-cooked food such as side dishes and boxed meal (including instant food)
almost every day? $\Box$ No
14) Do you eat out (including fast food) almost every day? $\cdots $ $_{1}\Box$ Yes $_{2}\Box$ No

# Q10. For the past 30 days, how often did you experience the items below? Please circle the corresponding numbers.

		Never	A little	Some- times	Most of the time	Always
1	Have you been hypersensitive?	0	1	2	3	4
2	Have you been in despair?	0	1	2	3	4
3	Have you been restless?	0	1	2	3	4
4	Have you felt down to the point where nothing can cheer you up?	0	1	2	3	4
5	Did you feel lethargic to do anything?	0	1	2	3	4
6	Did you feel like you were worthless?	0	1	2	3	4
7	Due to such conditions, have you even experienced inconveniences in your daily life?	0	1	2	3	4

Q11. Below are questions regarding your daily living condition.

1) Are you currently living away from your family because of the earthquake disaster?

 $_1\Box$  Yes  $_2\Box$  No

2) Please indicate the number of people you are currently living with (including yourself).
 Before the earthquake disaster ( ) At present ( )

3) Where do you currently live? Check  $\checkmark$  in the corresponding boxes below.

 $_1\square \text{ Municipally subsidized rental housing } _2\square \text{ Temporary housing } _3\square \text{ Restoration public housing } _4\square \text{ Rented house/Apartment } _5\square \text{Relative's house}$ 

)

```
_{6}\Box Owned house _{7}\Box Other (
```

4) Please tell us your current working hours.

```
_{1}\square Full-time/self-employed _{2}\square Part-time _{3}\square Unemployed (Including students and housewives)
```

5) How do you feel about your current living condition economically?

 $_{1}\square$  Tough  $_{2}\square$  Slightly tough  $_{3}\square$  Normal  $_{4}\square$  Slightly comfortable  $_{5}\square$  Comfortable

6) Were you (or your spouse) pregnant <u>before the earthquake disaster</u>? Also, were you living together with your <u>child who is underage</u>? (Multiple answers possible)

<ul> <li><sup>1</sup>□ No 2□ Yes</li> <li><sup>1</sup>□ I (or my spouse) was pregnant</li> <li><sup>2</sup>□ I was living with my pre-school or younger child</li> <li><sup>3</sup>□ I was living with my elementary school child.</li> <li><sup>4</sup>□ I was living with my middle school child.</li> <li><sup>5</sup>□ I was living with my underage child who has at least graduated from middle school.</li> </ul>
--

7) Are you (or your spouse) <u>currently</u> pregnant? Or are you currently living with <u>your child</u> <u>who is underage</u>? (Multiple answers possible)

ı□ No	₂□ Yes	<ul> <li>↓□ I am (or my spouse) is currently pregnant.</li> <li>₂□ I live with my preschool or younger child.</li> <li>₃□ I live with my elementary school child.</li> <li>₄□ I live with my middle school child.</li> <li>₅□ I live with my underage child who has at least graduated from middle school.</li> </ul>
		<b>1</b> i

Q12. Below are questions regarding radiation.

1) Below are questions regarding your awareness on the health effects of radiation. Please circle the corresponding number.

		The possibilities are very low			The possibilities are very high
1	How much health disorders (For example, cancer, etc.) do you expect to occur in the future due to the current radiation exposure?	1	2	3	4
2	How much health effects do you think the current radiation exposure will have on the future generations (your future children or grandchildren)?	1	2	3	4

2) <u>For the past month, how frequently did you experience inconveniences in your daily life</u> due to your anxieties about radiation?

 $_{1}\square$  Frequently  $_{2}\square$  Sometimes  $_{3}\square$  Rarely  $_{4}\square$  Never

Q13. Do you know anyone or any organization that you can consult regarding mental or physical issues that were caused by the Great East Japan Earthquake?

 $_{1}\Box$  Yes  $_{2}\Box$  No



If you do, check  $\checkmark$  for all corresponding items below.

<sup>1</sup>□ Family/relatives <sup>2</sup>□ Friends/acquaintances

<sup>3</sup>□ Colleagues/superiors

 $_4\square$  Municipal consultation service (City public health bureau, health center, etc.)

<sup>5</sup> Prefectural consultation service (Prefectural public health bureau/public health and welfare office, etc.)

 $_6\Box$  Mental health and welfare center

<sup>7</sup> Fukushima Kokoro no Care Center (Fukushima mental care center)

<sup>8</sup> Visiting care/nursing care service organizations

<sup>9</sup>□ Medical institutions such as psychosomatic medicine/psychiatry/neurology/mental clinics

 $_{10}\square$  Medical institutions other than the above (general internal medicine, surgical department, ophthalmology, otorhinology, orthopedics, obstetrics and gynecology, etc.

 $_{11}\square$  Facilities related to religion such as temples, shrines, churches, etc.

 $_{\scriptscriptstyle 12}\square$  Other (

)

#### 8XXXXXXXXX

✗ ※ If you have any concerns regarding your health or comments regarding this survey, please describe them below. Your comments will be used for references for future health management and surveys.

That is it for the questions. Please enclose the survey in a return envelope and send it by mail. Thank you for your cooperation.

Please answer the questionnaire regarding the basic survey.

Fukushima prefecture is conducting Fukushima Health Management Survey that aims to promote health of prefectural citizens at present and in the future. Have you submitted your basic survey questionnaire (the record of your behavior during the 4 months after the nuclear disaster)? (None of these responses will cause disadvantages to you).

 $_{1}\Box$  Yes  $_{2}\Box$  No  $_{3}\Box$  I don't know

Below are questions for those that answered "No" or "I don't know" above.

Can we resend your child's basic survey questionnaire?

 $_1\Box$  Yes  $_2\Box$  No

## [Contact]



ふくしまからはじめよう。

Exclusively for the Mental Health and Lifestyle Survey
 Radiation Medical Science Center,
 Fukushima Medical University
 Phone number: 024-549-5170

 (9:00-17:00 (with the exception of Dec 29-Jan 3 and weekends/holidays))

## The Implementation Status of the Pregnancy and Birth Survey

Reported on 25 December 2014

First interim report on the 2013 "Pregnancy and Birth Survey" (responses that have been collected by Oct 31<sup>st</sup> 2014)

1. Implementation status

For the 2013 "Pregnancy and Birth Survey," the survey targeted mothers who were issued a maternal and child health handbook within the prefecture from Aug 1<sup>st</sup> 2012 to Jul 31<sup>st</sup> 2013, or those who have been issued a maternity health record book outside the prefecture within the time period but have received prenatal examination and/or delivered the infant within the prefecture.

We have sent out 15,218 questionnaires after the middle of December 2013, and have re-sent questionnaires to people who have not responded as of Jul 31<sup>st</sup> 2014.

- 2. Main processing and analysis of the survey
  - (1) Response rate/number of respondents

The number of respondents (response rate) was 7,209 (47.4%). The breakdown of each is the following: Kempoku area 1,918 (52.7%), Kenchu area 1,969 (44.2%), Kennan area 585 (48.2%), Soso area 531 (45.1%), Iwaki area 1,184 (44.7%), Aizu area 831 (45.8%), Minami-Aizu area 83 (51.2%), and 108 outside of the prefecture.

- (2) Pregnancy outcomes
  - The ratio of miscarriage after the issuance of a maternity health record book was 0.78%, and preterm birth was 5.38%. These numbers were similar to those from 2011 (Miscarriage 0.77%, early birth 4.75%), and 2012 (Miscarriage 0.81%, early birth 5.74%).
  - The incidence rate of congenital malformation or abnormalities for single births was 2.35%. This number was similar to those from 2011 (2.85%) and 2012 (2.39%), as well as the national incidence rate (3-5%). The most common congenital malformation or abnormality was congenital heart defects with an incidence rate of 0.92%.
- (3) Mothers' mental health
  - The ratio of mothers determined to have depressive symptoms was (24.5%) and have decreased compared to 2011 (27.1%) and 2012 (25.5%).

(Reference: According to *Sukoyaka Oyako 21* or *Healthy Parents and Children 21* (The national movement plan for MCH), the ratio of postpartum depression evaluated by using the Edinburgh Postnatal Depression Scale was 9.0% (2013), and the estimated ratio of postpartum depression ratio from this survey based on the Edinburgh Postnatal Depression Scale was 13%. Document used for estimation: Mishina H, et al. Pediatr Int. 2009; 51: 48.)

- (4) Prenatal and delivery care
  - For the question, "Do you believe you were able to receive sufficient overall prenatal/delivery care this time?" the percentage that responded "I don't think so" or "Not at all" was 2.3%, and has decreased from 2012 (3.5%).

- The ratio of those who did not continue to receive prenatal care or delivery services at the initially scheduled facility was 14.7%. This was lower than 2011 (24.6%) but similar to 2012 (14.1%). By region, the ratio of outside the prefecture was the highest at 36.3%, and was similar to 2012 (26.9%). Those who changed to facilities outside the prefecture on their own accord was 22.4% and was less than 2011 (54.7%) but similar to 2012 (24.9%).
- The ratio of those who were unable to receive prenatal examination was 2.2% and was less than 2011 (18.8%) but similar to 2012 (2.2%).
- (5) Household and child-rearing situations
  - The ratio of those taking shelter (including temporary housing and others) was high in the Soso area (50.9%). This has decreased compared to 2012 (61.3%).
  - The ratio of those who answered, "I sometimes lose confidence in child rearing" was 17.5%, and increased since 2012 (15.4%). According to the 2010 Infant Health Survey, the ratio of those who answered that they have no confidence in child rearing when their child was one year old was 23.0%.
  - Feeding methods for children until weaning include: "Only breast milk" 36.5%, "combination of bottle milk and breast milk" 54.4%, "Only milk" 8.7%. The percentage of "Only breast milk" increased from 30.4% in 2011 and 35.2% in 2012. The reason for using milk included 1.7% who had concern for effects on breast milk due to radiation. This percentage has decreased from 2011 (19.8%) and 2012 (6.2%).
- (6) Desire for next pregnancy and requests for medical institutions
  - Those who wished to get pregnant again accounted for 52.8% (52.9% for 2012). According to the 14<sup>th</sup> Birth Trend Basic Survey of 2010, among couples who have been married for less than 10 years, those who are planning to have children were 58% (and 51% for couples who already have children but wish to have more).
  - For services requested by individuals who wish for a second pregnancy, the most common is "The expansion and enrichment of day-care center/extended hours childcare/sick child daycare" at 70.2%, followed by "Information and services regarding child rearing and pediatric care" at 66.2%.
  - For reasons of not desiring a second pregnancy, the most common is "Because I don't wish to" at 50.0%, followed by "I'm busy with my current child" at 35.9%. Another reason was "Since I have concerns regarding the radiation" at 5.6% and this was less than 14.8% for 2012.
- (7) Phone support situation
  - Among the 7,209 respondents, those who were determined to require phone consultation/support were 1,098. For the breakdown of support, the support for depression items were 741 (67.5%), the support for free entry contents was 357 (32.5%).
  - The most common consultation contents were "Matters regarding the mental and physical state of the mother" at 42.4%, followed by "Matters regarding child rearing" at 38.8%. "Matters regarding

the impact and concerns regarding radiation" was at 17.1%, and have shown a tendency of gradually decreasing compared to 2011 (29.2%) and 2012 (23.7%).

- (8) For free entry contents
  - Number of individuals who made entries in the free entry column were 861 (12.0%) and this has decreased compared to 3,722 (42.2%) in 2011, and 1,481 (20.7%) in 2012.

## Second total results for the "Pregnancy and Birth Survey" (Comparison with interim reports from 2011, 2012, 2013)

Note : Since the numerical values of the total results ratio are rounded to the closest whole number, there are cases where the total breakdown does not add up to 100%.

#### 1. Number of sent out questionnaires/number of responses

Area	Numbers sent out (%)	Number of respondents
		(%)
Kempoku	3,637 (23.9)	1,918 ( 52.7)
Kenchu	4,453 ( 29.3)	1,969 ( 44.2)
Kennan	1,213 ( 8.0)	585 ( 48.2)
Soso	1,178 ( 7.7)	531 ( 45.1)
Iwaki	2,649 (17.4)	1,184 ( 44.7)
Aizu	1,816 ( 11.9)	831 (45.8)
Minami-Aizu	162 ( 1.1)	83 ( 51.2)
Outside of	110 ( 07)	109 ( 09 2)
prefecture	110 ( 0.7)	108 ( 98.2)
Total	15,218 (100.0)	7,209 ( 47.4)

(2013) 7,209 targets responded during the time period between Dec 24<sup>th</sup> 2013 and Oct 31<sup>st</sup> 2014

(2012) 7,181 people responded during the time period between Dec 14<sup>th</sup> 2012 and Nov 30<sup>th</sup> 2013

Area	Numbers sent out (%)	Number of respondents
		(%)
Kempoku	3,347 (23.1)	1,857 ( 55.5)
Kenchu	4,243 ( 29.2)	2,067 (48.7)
Kennan	1,164 ( 8.0)	560 ( 48.1)
Soso	1,145 ( 7.9)	500 ( 43.7)
Iwaki	2,516 (17.3)	1,203 ( 47.8)
Aizu	1,848 ( 12.7)	819 ( 44.3)
Minami-Aizu	157 ( 1.1)	79 ( 50.3)
Outside of		06 (100 0)
prefecture	96 ( 0.7)	96 (100.0)
Total	14,516 (100.0)	7,181 ( 49.5)

(2011) 9,316 people responded during the time period between Jan 20th 2012 and Mar 31st 2013

		÷ .
Area	Numbers sent out (%)	Number of respondents
		(%)
Kempoku	3,647 (22.8)	2,288 ( 62.7)
Kenchu	4,819 ( 30.1)	2,857 ( 59.3)
Kennan	1,256 ( 7.8)	631 ( 50.2)
Soso	1,468 ( 9.2)	962 (65.5)
Iwaki	2,711 (16.9)	1,513 ( 55.8)
Aizu	1,919 ( 12.0)	957 (49.9)
Minami-Aizu	152 ( 0.9)	85 ( 55.9)
Outside of	20 ( 0 2)	22 ( 70 2)
prefecture	29 ( 0.2)	23 (79.3)
Total	16,001 (100.0)	9,316 ( 58.2)

For 2013, among the above-mentioned 7,209 respondents, the number of invalid responses was 42 (No response 10, not applicable 24, overlap 8) with a total of 7,167 collected responses. Furthermore, for each items there were no responses and invalid answers.

#### 2. Pregnancy outcome

(2013)		Percentage of pr	egnancies (%)			
Area	Currently	Delivered	Miscarriage	Abortion	Stillbirth	Total
	pregnant					
Kempoku	3(0.16)	1,888( 98.80)	15(0.78)	0(0.00)	5(0.26)	1,911
Kenchu	1(0.05)	1,937( 98.88)	16(0.82)	2(0.10)	3(0.15)	1,959
Kennan	1(0.17)	575( 98.63)	2(0.34)	0(0.00)	5(0.86)	583
Soso	1(0.19)	520( 98.48)	5(0.95)	0(0.00)	2(0.38)	528
Iwaki	3(0.25)	1,158( 98.30)	11(0.93)	1(0.08)	5(0.42)	1,178
Aizu	0(0.00)	816( 98.91)	7(0.85)	0(0.00)	2(0.24)	825
Minami-Aizu	0(0.00)	82( 98.80)	0(0.00)	0(0.00)	1(1.20)	83
Outside of	0(0.00)	102(100.00)	0(0.00)	0(0,00)	0(0.00)	102
prefecture	0(0.00)	102(100.00)	0(0.00)	0(0.00)	0(0.00)	102
Total	9(0.13)	7,078( 98.73)	56(0.78)	3(0.04)	23(0.32)	7,169

%Twins were basically counted as one delivery. Only twins who had different clinical outcomes were counted as two.

(2012)					Percentage of pr	regnancies (%)
Area	Currently	Delivered	Miscarriage	Abortion	Stillbirth	Total
	pregnant					
Kempoku	12(0.65)	1,812( 98.05)	18(0.97)	0(0.00)	6(0.32)	1,848
Kenchu	9(0.44)	2,033( 98.64)	11(0.53)	2(0.10)	6(0.29)	2,061
Kennan	3(0.54)	552( 98.57)	5(0.89)	0(0.00)	0(0.00)	560
Soso	4(0.82)	470( 96.71)	7(1.44)	3(0.62)	2(0.41)	486
Iwaki	8(0.67)	1,176( 98.16)	12(1.00)	0(0.00)	2(0.17)	1,198
Aizu	2(0.25)	804( 98.53)	5(0.61)	1(0.12)	4(0.49)	816
Minami-Aizu	0(0.00)	78(100.00)	0(0.00)	0(0.00)	0(0.00)	78
Outside of	0(0.00)	93(100.00)	0(0.00)	0(0.00)	0(0.00)	93
prefecture	0(0.00)	95(100.00)	0(0.00)	0(0.00)	0(0.00)	95
Total	38(0.53)	7,018( 98.29)	58(0.81)	6(0.08)	20(0.28)	7,140

%Twins were basically counted as one delivery. Only twins that have different clinical outcomes were counted as two.

(2011)					Percentage of p	regnancies (%)
Area	Currently	Delivered	Miscarriage	Abortion	Stillbirth	Total
	pregnant					
Kempoku	20(0.92)	2,124( 98.11)	16(0.74)	1(0.05)	4(0.18)	2,165
Kenchu	45(1.67)	2,616( 96.92)	28(1.04)	2(0.07)	8(0.30)	2,699
Kennan	7(1.17)	588( 98.00)	4(0.67)	0(0.00)	1(0.17)	600
Soso	4(0.44)	897( 98.25)	7(0.77)	1(0.11)	4(0.44)	913
Iwaki	20(1.41)	1,384( 97.33)	12(0.84)	1(0.07)	5(0.35)	1,422
Aizu	18(1.98)	888( 97.91)	1(0.11)	0(0.00)	0(0.00)	907
Minami-Aizu	2(2.38)	82( 97.62)	0(0.00)	0(0.00)	0(0.00)	84
Outside of	0(0,00)	22(100.00)	0(0,00)	0(0,00)	0(0,00)	22
prefecture	0(0.00)	22(100.00)	0(0.00)	0(0.00)	0(0.00)	22
Total	116(1.32)	8,601( 97.61)	68(0.77)	5(0.06)	22(0.25)	8,812

#### Premature delivery rate<sup>\*</sup> (Premature delivery is when the gestational age is 22-36 weeks)

(2013) (S	ingletons/tv	w1115)							1	
	(singletons/twins) Number of delivery weeks									
								Number	Premature	Premature
			Prematur	e delivery				of	delivery	delivery rate
								deliveries	count	$(\%)^{**}$
Area	12-	22-	24-	28-	32-	37-	42 weeks		(22-	
	21 weeks	23 weeks	27 weeks	31 weeks	36 weeks	41 weeks	or more		36 weeks)	
Kempoku	4	2	2	7	86	1,805	3	1,909	97	5.09
Kenchu	11	0	5	10	80	1,854	5	1,965	95	4.86
Kennan	1	0	5	1	30	542	7	586	36	6.15
Soso	1	0	0	1	34	490	1	527	35	6.65
Iwaki	5	2	4	7	60	1,083	9	1,170	73	6.27
Aizu	2	0	0	4	41	775	2	824	45	5.47
Minami-	0	0	0	0	2	82	0	84	2	2.38
Aizu										
Outside of	0	0	0	0	1	101	0	102	1	0.98
prefecture									1	
Total	24	4	16	30	334	6,732	27	7,167	384	5.38

(2013) (Singletons/twins)

\*The premature delivery rate was calculated by excluding cases where the number of fetuses or the number of weeks is unknown and when it was less than 12 weeks. Since twins were counted separately, they do not match the target number. Since one of the twins was a miscarriage less than 12 weeks in one of the cases, it was omitted from the data.

<sup>\*\*</sup>Premature delivery rate was determined by deducting the number of childbirths less than 22 weeks from the total number of childbirths and using the result as the denominator.

#### (2012) (Singletons/twins)

	(Singletons/twins) Number of delivery weeks									
			Premature	delivery				Number of deliveries		Premature delivery rate
Area	12-	22-	24-	28-	32-	37-	42 weeks		22-	
	21 weeks	23 weeks	27 weeks	31 weeks	36 weeks	41 weeks	or more		36 weeks	
Kempoku	7	0	3	7	75	1,734	6	1,832	85	4.66
Kenchu	7	3	5	10	115	1,911	7	2,058	133	6.48
Kennan	4	0	1	3	19	530	5	562	23	4.12
Soso	8	1	3	6	23	442	2	485	33	6.92
Iwaki	7	0	3	5	57	1,122	1	1,195	65	5.47
Aizu	4	1	2	3	54	755	0	819	60	7.36
Minami- Aizu	0	0	0	0	8	71	0	79	8	10.13
Outside of prefecture	0	0	0	0	0	93	0	93	0	0.00
Total	37	5	17	34	351	6,658	21	7,123	407	5.74

#### (2011) (Singletons/twins)

(2011)	Ongictons	10011107								
		(Singletons/twins) Number of delivery weeks								
			Prematur	e delivery				Number of deliveries		Premature delivery rate
Area	12-	22-	24-	28-	32-	37-	42 weeks		22-	
	21 weeks	23 weeks	27 weeks	31 weeks	36 weeks	41 weeks	or more		36 weeks	
Kempoku	10	1	3	5	84	2,032	6	2,141	93	4.36
Kenchu	14	2	2	15	103	2,509	15	2,660	122	4.61
Kennan	2	2	0	4	23	559	4	594	29	4.90
Soso	2	2	4	4	30	849	4	895	40	4.48
Iwaki	5	2	3	6	64	1,317	10	1,407	75	5.35
Aizu	0	1	0	2	47	845	2	897	50	5.57
Minami -Aizu	0	0	0	0	3	81	0	84	3	3.57
Outside of prefecture	0	0	0	0	0	22	0	22	0	0.00
Total	33	10	12	36	354	8,214	41	8,700	412	4.75

#### Presence of congenital malformation/abnormality

This targeted singletons after 12 weeks.

(2013)				Number of cases (%)
Area	Yes	No	Invalid responses	Total
Kempoku	42(2.25)	1,789(96.03)	32(1.72)	1,863
Kenchu	46(2.39)	1,826(94.86)	53(2.75)	1,925
Kennan	8(1.40)	549(96.32)	13(2.28)	570
Soso	9(1.74)	495(95.74)	13(2.51)	517
Iwaki	33(2.85)	1,096(94.81)	27(2.34)	1,156
Aizu	19(2.36)	767(95.28)	19(2.36)	805
Minami-Aizu	2(2.44)	80(97.56)	0(0.00)	82
Outside of	2(1.96)	97(95.10)	3(2.94)	102
prefecture				
Total	161(2.29)	6,699(95.43)	160(2.28)	7,020

Incidence rate of congenital malformation/abnormality: 2.35% (The denominator was the number of valid responses)

(2012)				Number of cases (%)
Area	Yes	No	Invalid response	Total
Kempoku	39(2.16)	1,735(95.96)	34(1.88)	1,808
Kenchu	50(2.48)	1,930(95.54)	40(1.98)	2,020
Kennan	13(2.36)	520(94.55)	17(3.09)	550
Soso	14(2.95)	437(92.00)	24(5.05)	475
Iwaki	25(2.14)	1,117(95.72)	25(2.14)	1,167
Aizu	19(2.37)	761(94.77)	23(2.86)	803
Minami-Aizu	1(1.30)	76(98.70)	0(0.00)	77
Outside of	2(2,15)	00(0( 77)	1(1.09)	02
prefecture	2(2.15)	90(96.77)	1(1.08)	93
Total	163(2.33)	6,666(95.32)	164(2.35)	6,993

Incidence rate of congenital malformation/abnormality: 2.39% (The denominator is the number of valid responses)

(2011)				Number of cases (%)
Area	Yes	No	Invalid	Total
			response	
Kempoku	55 (2.60)	1,989 (93.95)	73 (3.45)	2,117
Kenchu	76 (2.92)	2,418 (92.86)	110 (4.22)	2,604
Kennan	22 (3.77)	539 (92.29)	23 (3.94)	584
Soso	19 (2.13)	837 (93.94)	35 (3.93)	891
Iwaki	38 (2.78)	1,271 (92.98)	58 (4.24)	1,367
Aizu	23 (2.63)	825 (94.50)	25 (2.86)	873
Minami-Aizu	0 (0.00)	77 (96.25)	3 (3.75)	80
Outside of	1 (4 55)	20 (00 01)	1 (4 55)	
prefecture	1 (4.55)	20 (90.91)	1 (4.55)	22
Total	234 (2.74)	7,976 (93.42)	328 (3.84)	8,538

Incidence rate of congenital malformation/abnormality: 2.85% (The denominator is the number of valid responses)

#### Incidence rate of each disease

These targeted singletons with congenital malformations/abnormalities (multiple answers possible)

Area	Cataract	Heart	Kidney/	Spina	Microcep	Hydroce	Cleft lip/	Gastroint	Imperfor	Polydact	Other
		defect	urinary	bifida	haly	phalus	palate	estinal	ate anus	yly/synd	
			tract					atresia		actyly	
			malform								
			ation								
Kempoku	0	20	4	0	0	1	1	2	0	3	16
Kenchu	0	16	3	2	0	0	4	1	0	8	17
Kennan	0	3	0	0	0	0	2	0	0	2	2
Soso	0	2	2	1	0	0	0	2	1	2	2
Iwaki	1	14	1	0	0	0	4	1	0	4	8
Aizu	0	6	2	0	0	0	0	0	1	3	8
Minami- Aizu	0	2	0	0	0	0	0	0	0	0	0
Outside		0									2
of	0		0	0	0	0	0	0	0	0	
prefecture											
Total	1	63	12	3	0	1	11	6	2	22	55
Area	0.01%	0.92%	0.17%	0.04%	0.00%	0.01%	0.16%	0.09%	0.03%	0.32%	0.80%

(2013)

\*\*Multiple answers were possible. The denominator of incidence rates was the number of valid responses (total number of those who have responded "yes" or "no")

#### Breakdown of "Other"

Singletons with congenital malformations/abnormalities (multiple answers possible)

Ear appendage	7	Oligodactyly	2	Hernia of umbilical cord	1	Congenital chylothorax	1
Club foot	7	Birthmark	2	Absence of both arms	1	Ear deformity	1
Microtia	6	Congenital adrenal hyperplasia	2	18 trisomy	1	Diaphragmatic hernia	1
Down syndrome	4	Absence of scalp	1	Ptosis	1	Malrotation	1
Fistula auris congenita	3	Gastrointestinal perforation	1	Limb-shortening syndrome	1	Methemogulobinemia	1
Chromosomal abnormality	2	Congenital back knee	1	Inguinal hernia	1	Split-hand/ Split-foot malformation	1
Deafness	2	Pes abductus	1	Obstructio ductus nasolacrimalis	1	Brachydactyly	1
Angioma	2	Osteogenesis imperfecta	1	Hypothyroidism	1	Congenital knee dislocation	1

Area	Cataract	Heart defect	Kidney/ urinary tract malform ation	Spina bifida	Microcep haly	Hydroce phalus	Cleft lip/ palate	Gastroint estinal atresia	Imperfor ate anus	Polydact yly/synd actyly	Other
Kempoku	0	8	6	0	0	0	2	2	0	4	19
Kenchu	0	20	5	0	1	0	4	2	0	3	23
Kennan	1	5	1	1	0	2	0	0	0	1	3
Soso	1	6	0	1	0	0	2	1	0	1	4
Iwaki	0	9	2	1	0	0	3	1	1	4	6
Aizu	0	6	0	0	0	0	2	0	1	2	8
Minami- Aizu	0	0	0	0	0	0	0	1	0	0	0
Outside of prefecture	0	0	0	0	0	0	1	0	0	0	1
Total	2	54	14	3	1	2	14	7	2	15	64
Incidenc e rate	0.03%	0.79%	0.21%	0.04%	0.01%	0.03%	0.21%	0.10%	0.03%	0.22%	0.94%

\*\*Multiple answers were possible. The denominator of incidence rates was the number of valid responses (Total number of people who responded "yes" or "no")

#### Breakdown of "other"

(2012)

Singletons with congenital malformations/abnormalities (multiple choices were allowed)

Ear appendage	10	Albinism	1	Fistula auris congenita	1	Osteogenesis imperfecta	1
Down syndrome	7	Cystic lung adenomatoid deformity	1	Congenital hydrothorax	1	Localized gastrointestinal perforation	1
Deafness	2	Encephalocele	1	Congenital spherocytosis	1	Angioma	1
Malrotation	2	Vestigial remnant between allantois	1	Congenital cytomegalovirus	1	Liver hemangioma	1
Hydrops fetalis	2	Clubfoot	1	Ankyloglossia	1	Pes calcaneovalgus	1
Cavernous hemangioma	2	Craniotabes	1	Toxic erythema of the newborn	1	External auditory canal atresia	1
Diaphragmatic hernia	2	Simple hemangioma	1	Arms hypoplasia	1	Microphthalmia	1
Arachnoidal cyst	2	Dislocation	1	Microtia	1	Dextrocardia	1
Ovarian cyst	1	Chromosomal abnormality	1	Auricle low formation	1	Torticollis	1
Birthmark	1	Congenital knee dislocation	1	Auricle abnormality	1	Inguinal hernia	1
Adrenal hyperplasia	1	Congenital pigmented mole	1	Ear deformity	1	Trisomy 18	1

10

#### (2011) Number of cases (%)

(=011)		01 04000 ()	· ·									
	Cataract	Heart	Kidney/	Spina	Microceph	Hydroceph	Cleft lip/	Gastrointe	Imperforat	Polydactyl	Other	
		defect	urinary	bifida	aly	alus	palate	stinal	e anus	y/syndacty		
Area			tract					artesia		ly		Total
			malformati									
			on									
Kempoku	0	20	6	1	0	0	6	1	2	2	23	61
Kenchu	1	22	9	3	1	1	6	2	1	7	33	86
Kennan	0	5	2	0	0	0	0	1	0	2	12	22
Soso	0	5	0	1	0	0	1	1	0	3	9	20
Iwaki	0	14	5	1	0	0	0	1	1	5	16	43
Aizu	0	7	0	0	0	0	2	0	1	3	10	23
Minami- Aizu	0	0	0	0	0	0	0	0	0	0	0	0
Outside of prefecture	0	0	0	0	0	0	0	0	0	0	1	1
Total	1	73	22	6	1	1	15	6	5	22	104	256
Incidenc e rate	0.01%	0.89%	0.27%	0.07%	0.01%	0.01%	0.18%	0.07%	0.06%	0.27%	1.27%	3.12%

\*Multiple answers were possible. The denominator of incidence rates was the number of valid responses (Total number of people who have responded "yes" or "no")

X Since the total including invalid responses was taken as the denominator in the result report of 2011, the values differed from ones obtained this time.

#### Breakdown of "other"

Singletons with congenital malformations/abnormalities (multiple answers were possible)

			<u>``</u>		<i>.</i>		
Birth mark	9	Congenital hip dislocation	2	Pes calcaneovalgus	1	Congenital cystic	1
	-		_		_	adenomatoid deformity	_
Ear appendage	8	Holoprosencephaly	2	Ptosis	1	Congenital cutis laxa	1
Down syndrome	6	Cryptorchidism	2	Depressor anguli oris muscle	1	Chromosomal abnormality	1
Angioma	5	Chylothorax	2	Depressor anguli oris muscle hypoplasia	1	Hydrops fetalis	1
Inguinal hernia	4	Gastroschisis	2	Laryngomalacia	1	Thanatophoric dysplasia	1
Clubfoot	4	Cleft hand	2	Thyroid abnormalities	1	Malrotation	1
Deafness	4	Trisomy 13	1	Hypothyroidism	1	Craniotabes	1
Infantile		Trisomy 18		Lipoma		Persistent pupillary	
hemangioma	2	-	1	-	1	membrane	1
(strawberry	3		1		1		1
mark)							
Microtia	3	Klinefelter's syndrome	1	Auricle abnormality/ meatal atresia	1	Achondroplasia	1
Dermal sinus	3	Rickets	1	Microphthalmia	1	Periventricular leukomalacia	1
Cretinism	2	Cytomegalovirus infection	1	Frenulum of upper lip ankylosis	1	Skin tumor (eye)	1
Hydrocele	2	Prader–Willi syndrome	1	Testicular agenesis (One side)	1	Obstructio ductus nasolacrimalis	1
Torticollis	2	Diaphragmatic hernia	1	Cystic teratoma	1	Congenital adrenal hyperplasia	1
Incontinentia pigmenti	2	Ambiguous genitalia	1	Fistula auris congenita	1	Hernia of the umbilical cord	1
						Neck lymphangioma	1

## Presence of congenital malformation/abnormality This targeted twins after 12 weeks.

(2013)				Number of cases (%)
Area	Yes	No	Invalid responses	Total
Kempoku	2( 4.35)	42(91.30)	2( 4.35)	46
Kenchu	6(15.00)	33(82.50)	1( 2.50)	40
Kennan	0( 0.00)	15(93.75)	1( 6.25)	16
Soso	0( 0.00)	8(80.00)	2(20.00)	10
Iwaki	2(14.29)	10(71.43)	2(14.29)	14
Aizu	1( 5.26)	17(89.47)	1( 5.26)	19
Minami-Aizu	1(50.00)	1(50.00)	0( 0.00)	2
Outside of prefecture	0( 0.00)	0( 0.00)	0( 0.00)	0
Total	12( 8.16)	126(85.71)	9( 6.12)	147

Since one of the twins was a miscarriage less than 12 weeks, this was omitted; thus, the number is not a multiple of 2.

(2012)				Number of cases (%)
Area	Yes	No	Invalid	Total
			responses	
Kempoku	1 (4.17)	22 ( 91.67)	1 ( 4.17)	24
Kenchu	1 (2.63)	37 ( 97.37)	0 ( 0.00)	38
Kennan	0 (0.00)	12 (100.00)	0 ( 0.00)	12
Soso	0 (0.00)	9 ( 90.0)	1 (10.00)	10
Iwaki	1 (3.57)	23 ( 82.14)	4 (14.29)	28
Aizu	1 (6.25)	15 ( 93.75)	0 ( 0.00)	16
Minami-Aizu	0 (0.00)	2 (100.00)	0 ( 0.00)	2
Outside of	0 (0 00)	0 ( 0 00)	0 ( 0 00)	0
prefecture	0 (0.00)	0 ( 0.00)	0 ( 0.00)	0
Total	4 (3.08)	120 ( 92.31)	6 ( 4.62)	130

(2011)

Number of cases (%)

( - )				(1)
Area	Yes	No	Invalid	Total
			responses	
Kempoku	2 ( 8.33)	19 ( 79.17)	3 (12.50)	24
Kenchu	3 ( 5.36)	50 ( 89.29)	3 ( 5.36)	56
Kennan	1 (10.00)	9 ( 90.00)	0 ( 0.00)	10
Soso	0 ( 0.00)	4 (100.00)	0 ( 0.00)	4
Iwaki	0 ( 0.00)	36 ( 90.00)	4 (10.00)	40
Aizu	2 ( 8.33)	20 ( 83.33)	2 ( 8.33)	24
Minami-Aizu	0 ( 0.00)	3 ( 75.00)	1 (25.00)	4
Outside of	0 ( 0 00)	0 ( 0 00)	0 ( 0 00)	0
prefecture	0 ( 0.00)	0 ( 0.00)	0 ( 0.00)	0
Total	8 ( 4.94)	141 ( 87.04)	13 ( 8.02)	162

#### Breakdown of diseases

These targeted cases of twins with congenital malformation/abnormality (Multiple answers were possible)

(2013)

Area	Cataract	Heart	Kidney/	Spina	Microce	Hydroce	Cleft	Gastro	Imperforate	Polydactyly/	Other
		defect	urinary	bifida	phaly	phalus	lip/	intestinal	anus	syndactyly	
			tract				palate	artesia			
			malform								
			ation								
Kempoku	0	1	0	0	0	0	1	0	0	0	1
Kenchu	0	3	0	0	0	2	1	1	0	0	1
Kennan	0	0	0	0	0	0	0	0	0	0	0
Soso	0	0	0	0	0	0	0	0	0	0	0
Iwaki	0	2	0	0	0	0	0	0	0	0	0
Aizu	0	0	0	1	0	0	0	0	0	0	0
Minami- Aizu	0	0	0	0	0	0	0	0	0	0	1
Outside of prefecture	0	0	0	0	0	0	0	0	0	0	0
Total	0	6	0	1	0	2	2	1	0	0	3
Breakdown of	f "other"										
Ear appenda	ıge		1 case								
Absence of a	scalp		1 case								
Asplenia syr	ndrome		1 case								
2012)											
Area	Cataract	Heart	Kidney/	Spina	Microce	Hydroce	Cleft	Gastro	Imperforate	Polydactyly	Other

Area	Cataract		Kidney/			Hydroce		Gastro		Polydactyly	Other
		defect	tract malform	bifida	phaly	phalus	lip/ palate	intestinal artesia	anus	/syndactyly	
			ation								
Kempoku	0	0	0	1	0	0	0	0	0	0	1
Kenchu	0	0	0	0	0	0	0	0	0	0	1
Kennan	0	0	0	0	0	0	0	0	0	0	0
Soso	0	0	0	0	0	0	0	0	0	0	0
Iwaki	0	0	0	0	0	0	1	0	0	0	0
Aizu	0	0	0	1	0	1	0	0	0	0	0
Minami- Aizu	0	0	0	0	0	0	0	0	0	0	0
Outside of prefecture	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	2	0	1	1	0	0	0	2

#### Breakdown of "other"

Hypothyroidism	1 case
Hernia	1 case

#### (2011)

(2011)		<b>TT</b> /	TZ'1 /	<u> </u>	3.7	TT 1	01 0 1 0	<u> </u>	T C		0.1
Area	Cataract		Kidney/	Spina	Microc	Hydroc	Cleft lip/	Gastroin	Imperfor	Polydact	Other
		defect	urinary tract	bifida	ephaly	ephalus	palate	testinal artesia	ate anus	yly/synd	
			malform					anesia		actyly	
			ation								
Kempoku	0	0	0	0	0	0	1	0	0	0	1
Kenchu	0	0	0	1	0	0	0	0	0	0	2
Kennan	0	1	0	0	0	0	0	0	0	0	0
Soso	0	0	0	0	0	0	0	0	0	0	0
Iwaki	0	0	0	0	0	0	0	0	0	0	0
Aizu	0	2	0	0	0	0	0	0	0	0	0

Minami -Aizu	0	0	0	0	0	0	0	0	0	0	0
Outside of prefecture	0	0	0	0	0	0	0	0	0	0	0
Total	0	3	0	1	0	0	1	0	0	0	3

#### Breakdown of "other"

Congenital cystic	1 0000
adenomatoid deformity	1 case
Hydrops fetalis	1 case

### 3. Mothers' mental health

Tendency for depression: Number of respondents who answered yes for both, yes for one of them, and no for both.

(2013)	013) Number of cases (%)									
Area	Yes for both	Yes for one	No for both	Invalid	Total					
				responses						
Kempoku	202(10.6)	300(15.7)	1,401(73.3)	8(0.4)	1,911					
Kenchu	190( 9.7)	252(12.9)	1,511(77.1)	6(0.3)	1,959					
Kennan	62(10.6)	84(14.4)	436(74.8)	1(0.2)	583					
Soso	66(12.5)	84(15.9)	376(71.2)	2(0.4)	528					
Iwaki	112( 9.5)	156(13.3)	906(77.0)	3(0.3)	1,177					
Aizu	83(10.1)	108(13.1)	629(76.3)	4(0.5)	824					
Minami-Aizu	13(15.7)	14(16.9)	55(66.3)	1(1.2)	83					
Outside of	10( 9.8)	17(16.7)	74(72.5)	1(1.0)	102					
prefecture										
Total	738(10.3)	1,015(14.2)	5,388(75.2)	26(0.4)	7,167					

% Tendency for depression: 24.5% (("Yes for both" 738 + "Yes for one" 1,015) / Total 7,167 cases)

(2012)	012) Number of cases (%)								
Area	Yes for both	Yes for one	No for both	Invalid	Total				
				responses					
Kempoku	188(10.2)	295(16.0)	1,363(73.8)	1(0.1)	1,847				
Kenchu	225(10.9)	310(15.0)	1,522(73.8)	4(0.2)	2,061				
Kennan	47( 8.4)	86(15.4)	423(75.5)	4(0.7)	560				
Soso	67(13.8)	89(18.3)	330(67.9)	0(0.0)	486				
Iwaki	111( 9.3)	157(13.1)	928(77.5)	2(0.2)	1,198				
Aizu	94(11.5)	117(14.3)	602(73.8)	3(0.4)	816				
Minami-Aizu	5( 6.4)	9(11.5)	64(82.1)	0(0.0)	78				
Outside of	5(5.4)	17(18.3)	71(76.3)	0(0.0)	93				
prefecture									
Total	742(10.4)	1,080(15.1)	5,303(74.3)	14(0.2)	7,139				

% Tendency for depression: 25.5% (("Yes for both" 742 + "Yes for one" 1,080) / Total 7,139 cases)

(2011)				Nur	nber of cases (%)
Area	Yes for both	Yes for one	No for both	Invalid	Total
				responses	
Kempoku	290(13.4)	350(16.2)	1,482(68.5)	43(2.0)	2,165
Kenchu	344(12.7)	379(14.0)	1,922(71.2)	54(2.0)	2,699
Kennan	77(12.8)	83(13.8)	426(71.0)	14(2.3)	600
Soso	166(18.2)	134(14.7)	584(64.0)	29(3.2)	913
Iwaki	175(12.3)	176(12.4)	1,046(73.6)	25(1.8)	1,422
Aizu	83( 9.2)	121(13.3)	686(75.6)	17(1.9)	907
Minami	1( 1 0)	4( 4 0)	7((00.5)	2(2.4)	0.4
-Aizu	1( 1.2)	4(4.8)	76(90.5)	3(3.6)	84
Outside					
of	5(22.7)	4(18.2)	12(54.5)	1(4.5)	22
prefecture					
Total	1,141(12.9)	1,251(14.2)	6,234(70.7)	186(2.1)	8,812

% Tendency for depression: 27.1% (("Yes for both" 1,141 + "Yes for one" 1,251) / Total 8,812)

## 4. Prenatal/delivery care

Do you think you were able to receive sufficient care regarding prenatal/delivery in general this time?

(2013)						Number	of cases (%)
Area	I strongly think	I think so	I can't say	I don't think so	I don't think so	Invalid	Total
	so				at all	responses	
Kempoku	511(26.7)	1,171(61.3)	184( 9.6)	33(1.7)	9(0.5)	3(0.2)	1,911
Kenchu	500(25.5)	1,187(60.6)	224(11.4)	37(1.9)	8(0.4)	3(0.2)	1,959
Kennan	113(19.4)	372(63.8)	88(15.1)	7(1.2)	1(0.2)	2(0.3)	583
Soso	140(26.5)	296(56.1)	67(12.7)	20(3.8)	3(0.6)	2(0.4)	528
Iwaki	313(26.6)	695(59.0)	140(11.9)	22(1.9)	4(0.3)	3(0.3)	1,177
Aizu	181(22.0)	543(65.9)	80( 9.7)	14(1.7)	2(0.2)	4(0.5)	824
Minami-Aizu	19(22.9)	54(65.1)	5( 6.0)	3(3.6)	1(1.2)	1(1.2)	83
Outside of	29(28.4)	65(63.7)	5( 4.9)	2(2.0)	0(0.0)	1(1.0)	102
prefecture							
Total	1,806(25.2)	4,383(61.2)	793(11.1)	138(1.9)	28(0.4)	19(0.3)	7,167

(2012)						Number	of cases (%)
Area	I strongly think so	I think so	I can't say	I don't think so	I don't think so at all	Invalid responses	Total
Kempoku	451(24.4)	1,089(59.0)	242(13.1)	49(2.7)	15(0.8)	1(0.1)	1,847
Kenchu	430(20.9)	1,203(58.4)	339(16.4)	61(3.0)	22(1.1)	6(0.3)	2,061
Kennan	94(16.8)	340(60.7)	106(18.9)	14(2.5)	2(0.4)	4(0.7)	560
Soso	89(18.3)	277(57.0)	95(19.5)	18(3.7)	5(1.0)	2(0.4)	486
Iwaki	310(25.9)	694(57.9)	151(12.6)	32(2.7)	7(0.6)	4(0.3)	1,198
Aizu	165(20.2)	509(62.4)	115(14.1)	20(2.5)	3(0.4)	4(0.5)	816
Minami-Aizu	21(26.9)	50(64.1)	5( 6.4)	2(2.6)	0(0.0)	0(0.0)	78
Outside of prefecture	42(45.2)	43(46.2)	6( 6.5)	2(2.2)	0(0.0)	0(0.0)	93
Total	1,602(22.4)	4,205(58.9)	1,059(14.8)	198(2.8)	54(0.8)	21(0.3)	7,139

Did you continue to receive these services at a facility where you were initially scheduled to receive prenatal examination/delivery?

(2013)			]	Number of cases (%)
Area	Yes	No	Invalid responses	Total
Kempoku	1,597(83.6)	307(16.1)	7(0.4)	1,911
Kenchu	1,657(84.6)	292(14.9)	10(0.5)	1,959
Kennan	522(89.5)	60(10.3)	1(0.2)	583
Soso	450(85.2)	76(14.4)	2(0.4)	528
Iwaki	1,009(85.7)	159(13.5)	9(0.8)	1,177
Aizu	712(86.4)	107(13.0)	5(0.6)	824
Minami-Aizu	70(84.3)	13(15.7)	0(0.0)	83
Outside of prefecture	65(63.7)	37(36.3)	0(0.0)	102
Total	6,082(84.9)	1,051(14.7)	34(0.5)	7,167

### Breakdown of "No" (it did not continue) (2013)

down of "No" (	(it did not contin	ue) (2013)			Number of	cases (%)
Area	Another within	Another outside	Another within	Another outside	No response	Total
	prefecture on my	prefecture on my	prefecture due to	prefecture due to		
	own will <sub>1</sub>	own will <sub>2</sub>	medical reasons 3	medical reasons <sub>4</sub>		
Kempoku	107(34.9)	58(18.9)	131(42.7)	2(0.7)	9(2.9)	307
Kenchu	88(30.1)	54(18.5)	140(47.9)	3(1.0)	7(2.4)	292
Kennan	23(38.3)	18(30.0)	17(28.3)	2(3.3)	0(0.0)	60
Soso	36(47.4)	15(19.7)	21(27.6)	1(1.3)	3(3.9)	76
Iwaki	34(21.4)	33(20.8)	88(55.3)	2(1.3)	2(1.3)	159
Aizu	26(24.3)	22(20.6)	58(54.2)	0(0.0)	1(0.9)	107
Minami-Aizu	5(38.5)	3(23.1)	5(38.5)	0(0.0)	0(0.0)	13
Outside of	2( 5.4)	32(86.5)	3( 8.1)	0(0.0)	0(0.0)	37
prefecture						
Total	321(30.5)	235(22.4)	463(44.1)	10(1.0)	22(2.1)	1,051

1 Decided to change to another facility within prefecture by one's own will, 2 Changed to another facility outside the prefecture by one's own will, 3 Instructed to move (or was transported) to another facility within prefecture due to medical reasons, 4 Instructed to move (or was transported) to another facility outside the prefecture due to medical reasons.

(2012)				Number of cases (%)
Area	Yes	No	Invalid response	Total
Kempoku	1,589(86.0)	248(13.4)	10(0.5)	1,847
Kenchu	1,743(84.6)	307(14.9)	11(0.5)	2,061
Kennan	490(87.5)	68(12.1)	2(0.4)	560
Soso	391(80.5)	92(18.9)	3(0.6)	486
Iwaki	1,038(86.6)	152(12.7)	8(0.7)	1,198
Aizu	703(86.2)	111(13.6)	2(0.2)	816
Minami-Aizu	71(91.0)	7( 9.0)	0(0.0)	78
Outside of	67(72.0)	25(26.9)	1(1.1)	93
prefecture				
Total	6,092(85.3)	1,010(14.1)	37(0.5)	7,139

#### Breakdown of "No" (did not continue) (2012)

Number of cases (%)

Area	Another within	Another outside	Another within	Another outside	No response	Total
	prefecture on my	prefecture on my	prefecture due to	prefecture due to		
	own will 1	own will <sub>2</sub>	medical reasons 3	medical reasons <sub>4</sub>		
Kempoku	70(28.2)	63(25.4)	108(43.5)	2(0.8)	5(2.0)	248
Kenchu	74(24.1)	70(22.8)	151(49.2)	3(1.0)	9(2.9)	307
Kennan	27(39.7)	21(30.9)	20(29.4)	0(0.0)	0(0.0)	68
Soso	34(37.0)	24(26.1)	26(28.3)	7(7.6)	1(1.1)	92
Iwaki	35(23.0)	34(22.4)	82(53.9)	0(0.0)	1(0.7)	152
Aizu	34(30.6)	18(16.2)	57(51.4)	0(0.0)	2(1.8)	111
Minami-Aizu	2(28.6)	1(14.3)	4(57.1)	0(0.0)	0(0.0)	7
Outside of	4(16.0)	20(80.0)	1( 4 0)	0(0,0)	0(0,0)	25
prefecture	4(16.0)	20(80.0)	1( 4.0)	0(0.0)	0(0.0)	25
Total	280(27.7)	251(24.9)	449(44.5)	12(1.2)	18(1.8)	1,010

1 Decided to change to another facility within prefecture by one's own will, 2 Changed to another facility outside the prefecture by one's own will, 3 Instructed to move (or was transported) to another facility within prefecture due to medical reasons, 4 Instructed to move (or was transported) to another facility outside the prefecture due to medical reasons.

(2011)				Number of cases (%)
Area	Yes	No	Invalid response	Total
Kempoku	1,860(85.9)	288(13.3)	17(0.8)	2,165
Kenchu	2,050(76.0)	626(23.2)	23(0.9)	2,699
Kennan	497(82.8)	94(15.7)	9(1.5)	600
Soso	236(25.8)	665(72.8)	12(1.3)	913
Iwaki	1,036(72.9)	369(25.9)	17(1.2)	1,422
Aizu	798(88.0)	99(10.9)	10(1.1)	907
Minami- Aizu	78(92.9)	6(7.1)	0(0.0)	84
Outside of prefecture	5(22.7)	17(77.3)	0(0.0)	22
Total	6,560(74.4)	2,164(24.6)	88(1.0)	8,812

#### Breakdown of "No" (did not continue) (2011)

Number of cases (%)

Dicukac		na not commu	c) (2011)			Number 0	1 cases (70)	<u></u>
Area	Another within	Another	Returned to	Returned to	Another within	Another outside	Number	0
	prefecture on	outside	hometown	hometown	prefecture due to	prefecture due to	valid	
	my own will 1	prefecture on	within	outside	medical reasons	medical reasons	responses	
		my own will 2	prefecture 3	prefecture 4	5	6		
Kempoku	54(19.4)	163( 58.4)	5( 1.8)	9(3.2)	51(18.3)	2( 0.7)		279
Kenchu	153(26.0)	292(49.7)	7(1.2)	15(2.6)	124(21.1)	7(1.2)		588
Kennan	24(27.6)	42(48.3)	3( 3.4)	1(1.1)	17(19.5)	1( 1.1)		87
Soso	283(43.4)	357(54.8)	4( 0.6)	10(1.5)	29( 4.4)	8( 1.2)		652
Iwaki	67(18.8)	242(67.8)	4(1.1)	9(2.5)	34( 9.5)	12( 3.4)		357
Aizu	31(32.6)	24(25.3)	4( 4.2)	1(1.1)	36(37.9)	2( 2.1)		95
Minami -Aizu	2(33.3)	1(16.7)	1(16.7)	0(0.0)	1(16.7)	1(16.7)		6
Outside of prefecture	0( 0.0)	17(100.0)	0( 0.0)	0(0.0)	0( 0.0)	0( 0.0)		17
Total	614(29.5)	1,138( 54.7)	28( 1.3)	45(2.2)	292(14.0)	33( 1.6)	2,	,081

The denominator was the number of respondents (Valid responses: 2,081). Since there were multiple responses, the total of percentage exceeds 100%.

X Since the total number including multiple responses were used as the denominator for the result report of 2011, the figures differ from the ones obtained this time.

1 Decided to change to another facility within prefecture by one's own will, 2 Changed to another facility outside the prefecture by one's own will, 3 Returned to hometown within the prefecture from before the disaster to receive examination at a different facility, 4 Returned to hometown outside the prefecture from before the disaster to receive examination at a different facility, 5 Instructed to move (or was transported) to another facility within prefecture due to medical reasons, 6 Instructed to move (or was transported) to another facility outside the prefecture due to medical reasons.

(2013)				Number of cases (%)
Area	Yes	No	Invalid response	Total
Kempoku	1,850(96.8)	55(2.9)	6(0.3)	1,911
Kenchu	1,904(97.2)	44(2.2)	11(0.6)	1,959
Kennan	574(98.5)	7(1.2)	2(0.3)	583
Soso	517(97.9)	9(1.7)	2(0.4)	528
Iwaki	1,156(98.2)	15(1.3)	6(0.5)	1,177
Aizu	802(97.3)	17(2.1)	5(0.6)	824
Minami-Aizu	80(96.4)	3(3.6)	0(0.0)	83
Outside of prefecture	96(94.1)	6(5.9)	0(0.0)	102
Total	6,979(97.4)	156(2.2)	32(0.4)	7,167

Were you able to receive the prenatal examination this time according to the previously determined schedule? (2013) Number of cases (%)

Breakdown of "No" (I was unable to receive examination as scheduled) (2013) Number of cases (%)

Area	Issues with pregnancy	No issues with	No response	Total
	course	pregnancy course		
Kempoku	10(18.2)	43(78.2)	2( 3.6)	55
Kenchu	14(31.8)	28(63.6)	2(4.5)	44
Kennan	1(14.3)	6(85.7)	0( 0.0)	7
Soso	3(33.3)	6(66.7)	0( 0.0)	9
Iwaki	3(20.0)	10(66.7)	2(13.3)	15
Aizu	8(47.1)	8(47.1)	1(5.9)	17
Minami-Aizu	1(33.3)	2(66.7)	0( 0.0)	3
Outside of	2(33.3)	4(66.7)	0( 0.0)	6
prefecture				
Total	42(26.9)	107(68.6)	7(4.5)	156

(2012)				Number of cases (%)
Area	Yes	No	No response	Total
Kempoku	1,792( 97.0)	46(2.5)	9(0.5)	1,847
Kenchu	1,999( 97.0)	49(2.4)	13(0.6)	2,061
Kennan	548(97.9)	9(1.6)	3(0.5)	560
Soso	472(97.1)	12(2.5)	2(0.4)	486
Iwaki	1,169( 97.6)	22(1.8)	7(0.6)	1,198
Aizu	795( 97.4)	19(2.3)	2(0.2)	816
Minami-Aizu	78(100.0)	0(0.0)	0(0.0)	78
Outside of prefecture	91( 97.8)	1(1.1)	1(1.1)	93
Total	6,944( 97.3)	158(2.2)	37(0.5)	7,139

Breakdown of "No" (I was unable to receive examination as scheduled) (2012)	Number of cases (%)
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Area	Issues with pregnancy	No issues with	No response	Total
	course	pregnancy course		
Kempoku	9(19.6)	36(78.3)	1(2.2)	46
Kenchu	14(28.6)	34( 69.4)	1(2.0)	49
Kennan	3(33.3)	6(66.7)	0( 0.0)	9
Soso	5(41.7)	5(41.7)	2(16.7)	12
Iwaki	7(31.8)	15( 68.2)	0( 0.0)	22
Aizu	4(21.1)	14(73.7)	1(5.3)	19
Minami-Aizu	0( 0.0)	0( 0.0)	0( 0.0)	0
Outside of prefecture	0( 0.0)	1(100.0)	0( 0.0)	1
Total	42(26.6)	111( 70.3)	5( 3.2)	158

(2011)				Number of cases (%)
Area	Yes	No	Invalid response	Total
Kempoku	1,849(85.4)	307(14.2)	9(0.4)	2,165
Kenchu	2,221(82.3)	453(16.8)	25(0.9)	2,699
Kennan	504(84.0)	88(14.7)	8(1.3)	600
Soso	596(65.3)	306(33.5)	11(1.2)	913
Iwaki	965(67.9)	437(30.7)	20(1.4)	1,422
Aizu	843(92.9)	53( 5.8)	11(1.2)	907
Minami-Ai zu	79(94.0)	5( 6.0)	0(0.0)	84
Outside of prefecture	15(68.2)	7(31.8)	0(0.0)	22
Total	7,072(80.3)	1,656(18.8)	84(1.0)	8,812

The breakdown of "No" (I was unable to receive examination as scheduled) (2011) Number of cases (%)

Area	I was unable to receive	I was unable to receive	Invalid response	Total
	examinations as	examinations as		
	scheduled and was	scheduled, but there		
	hospitalized	were no issues		
Kempoku	32(10.4)	269(87.6)	6(2.0)	307
Kenchu	46(10.2)	395( 87.2)	12(2.6)	453
Kennan	7( 8.0)	77(87.5)	4(4.5)	88
Soso	30( 9.8)	270( 88.2)	6(2.0)	306
Iwaki	37( 8.5)	395( 90.4)	5(1.1)	437
Aizu	19(35.8)	34 (64.2)	0(0.0)	53
Minami-Ai zu	0( 0.0)	5(100.0)	0(0.0)	5
Outside of prefecture	0( 0.0)	7(100.0)	0(0.0)	7
Total	171(10.3)	1,452( 87.7)	33(2.0)	1,656

## 5. Household and child rearing situations

State of evacuation (Are you currently taking shelter?)

(2013)					Number of	cases (%)
Area	Taking shelter in	Taking shelter in	Currently living at	No evacuation	Invalid responses	Total
	temporary	some place other	home			
	housing	than temporary				
		housing				
Kempoku	5(0.3)	43( 2.3)	425(22.2)	1,394(72.9)	44(2.3)	1,911
Kenchu	3(0.2)	35( 1.8)	544(27.8)	1,327(67.7)	50(2.6)	1,959
Kennan	0(0.0)	4( 0.7)	65(11.1)	502(86.1)	12(2.1)	583
Soso	41(7.8)	228(43.2)	165(31.3)	87(16.5)	7(1.3)	528
Iwaki	2(0.2)	23( 2.0)	682(57.9)	441(37.5)	29(2.5)	1,177
Aizu	0(0.0)	9(1.1)	36(4.4)	753(91.4)	26(3.2)	824
Minami-Aizu	0(0.0)	0( 0.0)	5( 6.0)	74(89.2)	4(4.8)	83
Outside of	0(0.0)	6( 5.9)	5( 4.9)	87(85.3)	4(3.9)	102
prefecture						
Total	51(0.7)	348( 4.9)	1,927(26.9)	4,665(65.1)	176(2.5)	7,167

(2012)					Number of	cases (%)
Area	Taking shelter in	Taking shelter in	Currently living at	No evacuation	Invalid responses	Total
	temporary	some place other	home			
	housing	than temporary				
		housing				
Kempoku	3(0.2)	87(4.7)	630(34.1)	1,115(60.4)	12(0.6)	1,847
Kenchu	4(0.2)	83( 4.0)	955(46.3)	1,005(48.8)	14(0.7)	2,061
Kennan	1(0.2)	12( 2.1)	106(18.9)	437(78.0)	4(0.7)	560
Soso	47(9.7)	251(51.6)	140(28.8)	41( 8.4)	7(1.4)	486
Iwaki	5(0.4)	40( 3.3)	863(72.0)	281(23.5)	9(0.8)	1,198
Aizu	0(0.0)	13( 1.6)	41( 5.0)	760(93.1)	2(0.2)	816
Minami-Aizu	0(0.0)	1(1.3)	3( 3.8)	73(93.6)	1(1.3)	78
Outside of prefecture	0(0.0)	6( 6.5)	9( 9.7)	76(81.7)	2(2.2)	93
Total	60(0.8)	493( 6.9)	2,747(38.5)	3,788(53.1)	51(0.7)	7,139

### Have you ever lost confidence in child rearing?

(2010)	se who have given bi		rtumber	01 Cuses (70)	
Area	Yes	No	Cannot say	Invalid responses	Total
Kempoku	364(19.3)	821(43.5)	690(36.5)	13(0.7)	1,888
Kenchu	354(18.3)	826(42.6)	741(38.3)	16(0.8)	1,937
Kennan	104(18.1)	277(48.2)	189(32.9)	5(0.9)	575
Soso	92(17.7)	227(43.7)	198(38.1)	3(0.6)	520
Iwaki	159(13.7)	580(50.1)	407(35.1)	12(1.0)	1,158
Aizu	123(15.1)	379(46.4)	308(37.7)	6(0.7)	816
Minami-Aizu	18(22.0)	30(36.6)	33(40.2)	1(1.2)	82
Outside of	27(26.5)	36(35.3)	39(38.2)	0(0.0)	102
prefecture					
Total	1,241(17.5)	3,176(44.9)	2,605(36.8)	56(0.8)	7,078

(2013)	<sup>⊗</sup> Only	those	who	have	given	hirth
(2013)	× Omv	unose	WIIO	nave	given	DILU

Number of cases (%)

(2012) ※Only tho	se who have given b	Number	of cases (%)		
Area	Yes	No	Cannot say	Invalid responses	Total
Kempoku	302(16.7)	804(44.4)	682(37.6)	24(1.3)	1,812
Kenchu	325(16.0)	902(44.4)	785(38.6)	21(1.0)	2,033
Kennan	80(14.5)	262(47.5)	205(37.1)	5(0.9)	552
Soso	71(15.1)	206(43.8)	181(38.5)	12(2.6)	470
Iwaki	139(11.8)	613(52.1)	410(34.9)	14(1.2)	1,176
Aizu	139(17.3)	368(45.8)	290(36.1)	7(0.9)	804
Minami-Aizu	9(11.5)	38(48.7)	31(39.7)	0(0.0)	78
Outside of prefecture	19(20.4)	29(31.2)	43(46.2)	2(2.2)	93
Total	1,084(15.4)	3,222(45.9)	2,627(37.4)	85(1.2)	7,018

Children's nourishment methods (what is the nourishment methods of your child until now (until beginning baby food))?

(2013)  $\times$  Only those who have given hirth

(2013) **Only those who have given birth				Numb	er of cases (%)
Area	Only breast milk	Combination of milk	Only milk	Invalid responses	Total
		and breast milk			
Kempoku	740(39.2)	1,015(53.8)	127( 6.7)	6(0.3)	1,888
Kenchu	686(35.4)	1,071(55.3)	171( 8.8)	9(0.5)	1,937
Kennan	184(32.0)	312(54.3)	77(13.4)	2(0.3)	575
Soso	184(35.4)	269(51.7)	67(12.9)	0(0.0)	520
Iwaki	464(40.1)	596(51.5)	91( 7.9)	7(0.6)	1,158
Aizu	260(31.9)	486(59.6)	69(8.5)	1(0.1)	816
Minami-Aizu	27(32.9)	44(53.7)	10(12.2)	1(1.2)	82
Outside of	42(41.2)	56(54.9)	4( 3.9)	0(0.0)	102
prefecture					
Total	2,587(36.5)	3,849(54.4)	616( 8.7)	26(0.4)	7,078

(2012) ** Only those who have given birth				Num	ber of cases (%)
Area	Only breast milk	Combination of milk	Only milk	Invalid responses	Total
		and breast milk			
Kempoku	670(37.0)	996(55.0)	136( 7.5)	10(0.6)	1,812
Kenchu	675(33.2)	1,140(56.1)	207(10.2)	11(0.5)	2,033
Kennan	158(28.6)	326(59.1)	67(12.1)	1(0.2)	552
Soso	146(31.1)	257(54.7)	63(13.4)	4(0.9)	470
Iwaki	466(39.6)	603(51.3)	99( 8.4)	8(0.7)	1,176
Aizu	272(33.8)	432(53.7)	97(12.1)	3(0.4)	804
Minami-Aizu	32(41.0)	35(44.9)	11(14.1)	0(0.0)	78
Outside of	50(53.8)	40(43.0)	1(1.1)	2(2.2)	93
prefecture	50(55.8)	40(43.0)	1(1.1)	2(2.2)	95
Total	2,469(35.2)	3,829(54.6)	681( 9.7)	39(0.6)	7,018

(2011)				Num	ber of cases (%)
Area	Only breast milk	Combination of milk and breast milk	Only milk	Invalid responses	Total
Kempoku	689(32.4)	1,318(62.1)	112( 5.3)	5(0.2)	2,124
Kenchu	759(29.0)	1,655(63.3)	193 (7.4)	9(0.3)	2,616
Kennan	168(28.6)	360(61.2)	59(10.0)	1(0.2)	588
Soso	241(26.9)	549(61.2)	100(11.1)	7(0.8)	897
Iwaki	484(35.0)	822(59.4)	74( 5.3)	4(0.3)	1,384
Aizu	238(26.8)	594(66.9)	55( 6.2)	1(0.1)	888
Minami -Aizu	33(40.2)	45(54.9)	4( 4.9)	0(0.0)	82
Outside of prefecture	5(22.7)	14(63.6)	2( 9.1)	1(4.5)	22
Total	2,617(30.4)	5,357(62.3)	599 (7.0)	28(0.3)	8,601

Reasons for using milk (for individuals who use combination of breast milk and milk as well as those who only use milk)

(2013)			Numł	per of cases (%)
Area	Not enough breast milk	Concerns for effects of	Other	Valid
		radiation on breast milk		responses
Kempoku	856(75.2)	16(1.4)	303(26.6)	1,138
Kenchu	961(77.8)	24(1.9)	290(23.5)	1,236
Kennan	305(80.1)	5(1.3)	80(21.0)	381
Soso	229(69.0)	10(3.0)	106(31.9)	332
Iwaki	511(75.3)	16(2.4)	169(24.9)	679
Aizu	432(78.1)	5(0.9)	130(23.5)	553
Minami-Aizu	39(73.6)	0(0.0)	17(32.1)	53
Outside of	47(78.3)	0(0.0)	15(25.0)	60
prefecture				
Total	3,380(76.3)	76(1.7)	1,110(25.0)	4,432

\* The denominator is the number of valid responses (those who described "the reason for using milk" among the ones who responded "combination of milk and breast milk" or "only milk").

%Since there are multiple responses, the total of percentages does not equal 100.0%.

(2012)			Numł	per of cases (%)
Area	Not enough breast milk	Concerns for effects of	Other	Valid
		radiation on breast milk		responses
Kempoku	884(78.7)	43(3.8)	238(21.2)	1,123
Kenchu	1,022(76.4)	113(8.4)	291(21.7)	1,338
Kennan	324(83.3)	27(6.9)	62(15.9)	389
Soso	246(77.6)	25(7.9)	63(19.9)	317
Iwaki	512(73.8)	52(7.5)	163(23.5)	694
Aizu	407(78.0)	13(2.5)	130(24.9)	522
Minami-Aizu	37(82.2)	2(4.4)	7(15.6)	45
Outside of	21(75.6)	1(2,4)	10(24.4)	41
prefecture	31(75.6)	1(2.4)	10(24.4)	41
Total	3,463(77.5)	276(6.2)	964(21.6)	4,469

\* The denominator is the number of valid responses (those who described "the reason for using milk" among the ones who responded "combination of milk and breast milk" or "only milk").

%Since there are multiple responses, the total of percentages does not equal 100.0%.

(2011)			Numł	per of cases (%)
Area	Not enough breast milk	Concerns for effects of	Other	Valid
		radiation on breast milk		responses
Kempoku	1,037(73.1)	248(17.5)	295(20.8)	1,418
Kenchu	1,305(71.6)	410(22.5)	318(17.4)	1,823
Kennan	277(66.6)	113(27.2)	85(20.4)	416
Soso	460(71.5)	150(23.3)	98(15.2)	643
Iwaki	619(70.0)	180(20.4)	188(21.3)	884
Aizu	512(80.1)	59( 9.2)	112(17.5)	639
Minami-Aizu	39(79.6)	6(12.2)	7(14.3)	49
Outside of	10(75.0)	1( ( ))	4(25.0)	1.6
prefecture	12(75.0)	1( 6.3)	4(25.0)	16
Total	4,261(72.4)	1,167(19.8)	1,107(18.8)	5,888

\*\*The denominator is the number of valid responses (those who described "the reason for using milk" among the ones who responded "combination of milk and breast milk" or "only milk").

\*Since there are multiple responses, the total percentage does not equal 100.0%.

\*Since the total number including multiple responses were used as the denominator for the result report of 2011, the figures differ from the ones obtained this time.

#### 6. Wish for next pregnancy and requests for medical institutions

Are you considering another pregnancy/delivery?

(2013)				Number of cases (%)
Area	Yes (I am	No (I am not	No response	Total
	planning to)	planning to)		
Kempoku	1,005(52.6)	878(45.9)	28(1.5)	1,911
Kenchu	1,042(53.2)	884(45.1)	33(1.7)	1,959
Kennan	305(52.3)	267(45.8)	11(1.9)	583
Soso	274(51.9)	243(46.0)	11(2.1)	528
Iwaki	600(51.0)	559(47.5)	18(1.5)	1,177
Aizu	453(55.0)	363(44.1)	8(1.0)	824
Minami-Aizu	41(49.4)	41(49.4)	1(1.2)	83
Outside of	67(65.7)	34(33.3)	1(1.0)	102
prefecture				
Total	3,787(52.8)	3,269(45.6)	111(1.5)	7,167

Services desired by those who answered "considering another pregnancy"					Number o	of cases (%)
Area	Improvement of	Expansion of	Information and	Radiation	Other	Valid
	system	childcare services	services	information		responses
Kempoku	572(59.0)	701(72.3)	628(64.7)	393(40.5)	107(11.0)	970
Kenchu	582(58.6)	717(72.1)	626(63.0)	438(44.1)	107(10.8)	994
Kennan	159(53.5)	197(66.3)	204(68.7)	111(37.4)	20( 6.7)	297
Soso	116(44.8)	160(61.8)	195(75.3)	119(45.9)	29(11.2)	259
Iwaki	322(55.4)	406(69.9)	398(68.5)	256(44.1)	56( 9.6)	581
Aizu	256(59.4)	303(70.3)	283(65.7)	144(33.4)	47(10.9)	431
Minami-Aizu	16(42.1)	18(47.4)	27(71.1)	13(34.2)	4(10.5)	38
Outside of	37(56.1)	49(74.2)	45(68.2)	24(36.4)	10(15.2)	66
prefecture						
Total	2,060(56.7)	2,551(70.2)	2,406(66.2)	1,498(41.2)	380(10.5)	3,636

\*The denominator is the number of valid responses (those who have answered "yes" for the question about wish for another pregnancy and provided answers to "services that you would want related to next pregnancy/delivery."). Since there are multiple responses, the total of percentages does not equal 100.0%.

Reasons for not considering another pregnancy

Number of cases (%)

Area	I simply don't	Unstable income	Absence of people	No facilities (day	Currently	Evacuation life
	wish to		who would	care center, etc.)	occupied with	
			provide help		child(ren)	
Kempoku	412(47.1)	187(21.4)	91(10.4)	54(6.2)	311(35.5)	5(0.6)
Kenchu	453(51.3)	213(24.1)	99(11.2)	71(8.0)	341(38.6)	1(0.1)
Kennan	152(57.6)	59(22.3)	25( 9.5)	15(5.7)	87(33.0)	0(0.0)
Sousou	116(47.9)	43(17.8)	22( 9.1)	19(7.9)	90(37.2)	22(9.1)
Iwaki	277(49.9)	120(21.6)	52( 9.4)	23(4.1)	191(34.4)	4(0.7)
Aizu	185(51.2)	74(20.5)	32( 8.9)	26(7.2)	128(35.5)	0(0.0)
Minami-Aizu	18(43.9)	12(29.3)	4( 9.8)	2(4.9)	11(26.8)	0(0.0)
Outside of prefecture	16(47.1)	4(11.8)	5(14.7)	2(5.9)	8(23.5)	0(0.0)
Total	1,629(50.0)	712(21.9)	330(10.1)	212(6.5)	1,167(35.9)	32(1.0)

Area	Dispersed family				Valid responses
	members	Age and health	Effects of radiation	Other	·
Kempoku	13(1.5)	311(35.5)	38(4.3)	143(16.3)	875
Kenchu	15(1.7)	283(32.0)	64(7.2)	119(13.5)	883
Kennan	5(1.9)	82(31.1)	22(8.3)	39(14.8)	264
Soso	10(4.1)	85(35.1)	19(7.9)	35(14.5)	242
Iwaki	8(1.4)	177(31.9)	28(5.0)	93(16.8)	555
Aizu	4(1.1)	114(31.6)	8(2.2)	51(14.1)	361
Minami-Aizu	0(0.0)	11(26.8)	1(2.4)	9(22.0)	41
Outside of	3(8.8)	9(26.5)	2(5.9)	4(11.8)	34
prefecture					
Total	58(1.8)	1,072(32.9)	182(5.6)	493(15.1)	3,255

\*\*The denominator is the number of valid responses (those who answered "no" and provided a "reason for not considering another pregnancy"). Since there are multiple responses, the total of percentages does not equal 100.0%.

Area	Yes (I am	No (I am not	No response	Total
	planning to)	planning to)		
Kempoku	990(53.6)	825(44.7)	32(1.7)	1,847
Kenchu	1,100(53.4)	926(44.9)	35(1.7)	2,061
Kennan	286(51.1)	267(47.7)	7(1.3)	560
Soso	244(50.2)	232(47.7)	10(2.1)	486
Iwaki	617(51.5)	555(46.3)	26(2.2)	1,198
Aizu	439(53.8)	364(44.6)	13(1.6)	816
Minami-Aizu	40(51.3)	37(47.4)	1(1.3)	78
Outside of prefecture	59(63.4)	33(35.5)	1(1.1)	93
Total	3,775(52.9)	3,239(45.4)	125(1.8)	7,139

(2012)	Number of cases (%)
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Services desired by	Number o	f cases (%)				
Area	Improvement of	Expansion of	Information and	Radiation	Other	Valid
	system	childcare services	services	information		responses
Kempoku	499(52.0)	639(66.6)	657(68.5)	577(60.2)	58( 6.0)	959
Kenchu	551(50.9)	738(68.1)	781(72.1)	700(64.6)	78( 7.2)	1,083
Kennan	146(53.1)	180(65.5)	189(68.7)	167(60.7)	23( 8.4)	275
Soso	98(41.2)	135(56.7)	186(78.2)	146(61.3)	15( 6.3)	238
Iwaki	308(50.7)	385(63.4)	451(74.3)	389(64.1)	37( 6.1)	607
Aizu	241(57.0)	304(71.9)	277(65.5)	203(48.0)	27( 6.4)	423
Minami-Aizu	18(46.2)	18(46.2)	32(82.1)	12(30.8)	8(20.5)	39
Outside of prefecture	32(56.1)	36(63.2)	40(70.2)	26(45.6)	1( 1.8)	57
Total	1,893(51.4)	2,435(66.2)	2,613(71.0)	2,220(60.3)	247( 6.7)	3,681

% The denominator is the number of valid responses (those who have answered "yes" and provided answers to "services that you would want related to next pregnancy/delivery"). Since there are multiple responses, the total of percentages does not equal 100.0%.

Reasons for not considering another pregnancy

Number of cases (%)

Area	I simply don't	Unstable income	Absence of people	No facilities (day	Currently	Evacuation life
	wish to		who would	care center, etc.)	occupied with	
			provide help		child(ren)	
Kempoku	421(51.2)	193(23.5)	73( 8.9)	40( 4.9)	277(33.7)	6( 0.7)
Kenchu	489(53.4)	260(28.4)	102(11.1)	84( 9.2)	346(37.8)	9(1.0)
Kennan	160(59.9)	59(22.1)	25( 9.4)	14( 5.2)	74(27.7)	1( 0.4)
Soso	112(48.7)	59(25.7)	24(10.4)	14( 6.1)	100(43.5)	56(24.3)
Iwaki	282(51.4)	149(27.1)	41(7.5)	36( 6.6)	187(34.1)	3( 0.5)
Aizu	184(51.4)	91(25.4)	39(10.9)	28( 7.8)	143(39.9)	2( 0.6)
Minami-Aizu	21(56.8)	10(27.0)	3( 8.1)	1(2.7)	15(40.5)	0( 0.0)
Outside of	21(63.6)	7(21.2)	3( 9.1)	5(15.2)	11(33.3)	1( 3.0)
prefecture						
Total	1,690(52.6)	828(25.8)	310( 9.7)	222( 6.9)	1,153(35.9)	78( 2.4)

Area	Dispersed family				Valid romanage
	members	Age and health	Effects of radiation	Other	Valid responses
Kempoku	15(1.8)	297(36.1)	103(12.5)	15( 1.8)	822
Kenchu	19(2.1)	274(29.9)	193(21.1)	23( 2.5)	916
Kennan	4(1.5)	87(32.6)	34(12.7)	6(2.2)	267
Soso	21(9.1)	61(26.5)	37(16.1)	4(1.7)	230
Iwaki	8(1.5)	181(33.0)	78(14.2)	17( 3.1)	549
Aizu	9(2.5)	99(27.7)	27(7.5)	10( 2.8)	358
Minami-Aizu	0(0.0)	10(27.0)	2( 5.4)	4(10.8)	37
Outside of	2(6.1)	3(9.1)	1( 3.0)	2(6.1)	33
prefecture	2(0.1)	5( 9.1)	1( 5.0)	2( 0.1)	55
Total	78(2.4)	1,012(31.5)	475(14.8)	81(2.5)	3,212

% The denominator is the number of valid responses (those who answered "no" and provided a "reason for not considering another pregnancy"). Since there are multiple responses, the total of percentage does not equal 100.0%.

## 7. Phone support situation

(2013)			People (%
Area N	Iental care support	Support by free entry	Number of
		contents	people who
		contents	require support
Kempoku	202 (70.1)	86 (29.9)	288
Kenchu	190 (64.0)	107 (36.0)	297
Kennan	62 (68.9)	28 (31.1)	90
Soso	67 (75.3)	22 (24.7)	89
Iwaki	113 (66.1)	58 (33.9)	171
Aizu	83 (67.5)	40 (32.5)	123
Minami -Aizu	13 (76.5)	4 (23.5)	17
Outside			
of	11 (47.8)	12 (52.2)	23
prefecture			
Total	741 (67.5)	357 (32.5)	1,098
(2012)			People (%)
Area	Mental care support		Number of
		Support by free entry	people who
		contents	require support
Kempoku	188 (67.6)	90 (32.4)	278
Kenchu	227 (67.0)	112 (33.0)	339
Kennan	47 (65.3)	25 (34.7)	72
Soso	71 (75.5)	23 (24.5)	94
Iwaki	112 (65.9)	58 (34.1)	170
Aizu	95 (71.4)	38 (28.6)	133
Minami-Aizu	6 (66.7)	3 (33.3)	9
Outside of			
prefecture	5 (55.6)	4 (44.4)	9
Total	751 (68.0)	353 (32.0)	1,104
(2011)			People (%)
Area	Mental care support		Number of
		Support by free entry	people who
		contents	require support
Kempoku	314 (90.0)	35 (10.0)	349
Kenchu	361 (87.8)	50 (12.2)	411
Kennan	81 (82.7)	17 (17.3)	98
Soso	175 (84.5)	32 (15.5)	207
Iwaki	192 (87.7)	27 (12.3)	219
Aizu	95 (87.2)	14 (12.8)	109
Minami-Aizu	1 (50.0)	1 (50.0)	2
Outside of			·····
prefecture	5 (83.3)	1 (16.7)	6
Total	1,224 (87.4)	177 (12.6)	1,401

Ratios of principal topics for consultation

(2013)							Number of cas	es (%)
Area	Matters regarding the impact and concern of radiation	Mattersregarding mother's mental and physical state	Matters regarding childrearing (ckily life)	Matters regarding child(ren)'s mental and physical state	Matters regarding evacuation life	Matters regarding domestic life	Other	Numbe r of people who require support
Kempoku	41 (14.2)	133 (46.2)	133 (46.2)	56 (19.4)	6 ( 2.1)	60 (20.8)	89 (30.9)	288
Kenchu	62 (20.9)	107 (36.0)	105 (35.4)	63 (21.2)	1 ( 0.3)	67 (22.6)	102 (34.3)	297
Kennan	19 (21.1)	48 (53.3)	33 (36.7)	18 (20.0)	2 ( 2.2)	24 (26.7)	19 (21.1)	90
Soso	14 (15.7)	41 (46.1)	37 (41.6)	19 (21.3)	11 ( 12.4)	17 (19.1)	26 (29.2)	89
Iwaki	32 (18.7)	69 (40.4)	53 (31.0)	35 (20.5)	3 ( 1.8)	25 (14.6)	69 (40.4)	171
Aizu	13 (10.6)	51 (41.5)	43 (35.0)	26 (21.1)	0 ( 0.0)	20 (16.3)	46 (37.4)	123
Minami-Aiz u	3 (17.6)	9 (52.9)	8 (47.1)	2 (11.8)	0 ( 0.0)	2 (11.8)	5 (29.4)	17
Outside of prefecture	4 (17.4)	8 (34.8)	14 (60.9)	4 (17.4)	0 ( 0.0)	3 (13.0)	5 (21.7)	23
Total	188 (17.1)	466 (42.4)	426 (38.8)	223 (20.3)	23 ( 2.1)	218 (19.9)	361 (32.9)	1,098

% The denominator is the number of valid responses (number of people who require support. Since there are multiple responses, the total of percentages does not equal 100.0%.

(2012)Number of cases (%) Area Numbe r of Matters regarding Mattersregardingthe Matters regarding Mattersregarding Matters regarding Matters regarding people impactandconcernof mother'smental and childrearing (daily child(ren)'smental and Other evacuation life domestic life who radiation physical state life) physical state require support Kempoku 70 (25.2) 92 (33.1) 92 (33.1) 32 (11.5) 5 (1.8) 27 (9.7) 74 (26.6) 278 Kenchu 43 (12.7) 83 (24.5) 105 (31.0) 79 (23.3) 44 (13.0) 9 (2.7) 101 (29.8) 339 Kennan 72 19 (26.4) 27 (37.5) 20 (27.8) 11 (15.3) 1 (1.4) 10 (13.9) 22 (30.6) Soso 15 (16.0) 28 (29.8) 21 (22.3) 14 (14.9) 6 (6.4) 6 ( 6.4) 34 (36.2) 94 Iwaki 47 (27.6) 65 (38.2) 47 (27.6) 29 (17.1) 0 (0.0) 14 (8.2) 48 (28.2) 170 Aizu 24 (18.0) 47 (35.3) 30 (22.6) 0 (0.0) 9 ( 6.8) 48 (36.1) 133 16 (12.0) Minami-Aiz 1 (11.1) 4 (44.4) 4 (44.4) 2 (22.2) 0 (0.0) 4 (44.4) 2 (22.2) 9 u Outside of 3 (33.3) 1 (11.1) 2 (22.2) 0(0.0) 0 (0.0) 1 (11.1) 5 (55.6) 9 prefecture Total 1,104 262 (23.7) 369 (33.4) 295 (26.7) 148 (13.4) 21 (1.9) 114 (10.3) 334 (30.3)

\*The denominator is the number of valid responses (number of people who require support. Since there are multiple responses, the total of percentages does not equal 100.0%.

(2011)	(2011) Number of cases (%							
Area	Matters regarding the impact and concern of radiation	Matters regarding mother's mental and physical state	Matters regarding child rearing (chily life)	Matters regarding child(ren)'s mental and physical state	Matters regarding evacuation life	Matters regarding domestic life	Oher	Number of people who require support
Kempoku	113 (32.4)	70 (20.1)	67 (19.2)	30 ( 8.6)	32 ( 9.2)	15 (4.3)	120 (34.4)	349
Kenchu	129 (31.4)	79 (19.2)	49 (11.9)	41 (10.0)	39 ( 9.5)	20 (4.9)	144 (35.0)	411
Kennan	31 (31.6)	12 (12.2)	12 (12.2)	12 (12.2)	2 ( 2.0)	4 (4.1)	41 (41.8)	98
Soso	45 (21.7)	45 (21.7)	26 (12.6)	24 (11.6)	45 (21.7)	14 (6.8)	73 (35.3)	207
Iwaki	62 (28.3)	49 (22.4)	33 (15.1)	27 (12.3)	11 ( 5.0)	10 (4.6)	83 (37.9)	219
Aizu	28 (25.7)	25 (22.9)	9 ( 8.3)	12 (11.0)	1 ( 0.9)	6 (5.5)	45 (41.3)	109
Minami- Aizu	0 ( 0.0)	1 (50.0)	0 ( 0.0)	0 ( 0.0)	0 ( 0.0)	0 (0.0)	1 (50.0)	2
Outside of prefecture	1 (16.7)	2 (33.3)	0 ( 0.0)	1 (16.7)	0 ( 0.0)	0 (0.0)	2 (33.3)	6
Total	409 (29.2)	283 (20.2)	196 (14.0)	147 (10.5)	130 ( 9.3)	69 (4.9)	509 (36.3)	1,401

\*The denominator is the number of valid responses (number of people who require support). Since there are multiple responses, the total of percentages does not equal 100.0%.

XSince the denominator was the total number including multiple responses for the 2011 result report, the figures differ from the ones obtained this time.

## 8. Free entry

#### Breakdown of topics

(2013)

## 7,167 Respondents, 861 free entries (12.0%)

## (2012)

### 7,139 Respondents, 1,481 free entries (20.7%)

7,107 Respondents, 001 nee entries (12.070)	Cases (%)
Opinions/complaints about this survey	146 (17.0)
The impact of radiation on the fetus/child	112 (13.0)
Bad physical condition	97 (11.3)
Child-rearing consultation (Baby food, how to make them play, how to interact)	91 (10.6)
Requests for distributing information regarding radiation and publication of research results	80 ( 9.3)
Improving medical service and requests regarding physical care	66 ( 7.7)
Complaints of their own mental issues	64 ( 7.4)
Impact of radiation on baby food/food	61 ( 7.1)
Concerns regarding the impact of radiation on water	53 ( 6.2)
Requests regarding the improvement of child-rearing support service	46 ( 5.3)
Concerns of radiation while going/playing outside	43 ( 5.0)
Concerns and complaints regarding insufficient medical service	43 ( 5.0)
Approval of this study	35 ( 4.1)
Concerns and complaints regarding the reliability/insufficiency of information	28 ( 3.3)
Request regarding overall test/health examination	27 ( 3.1)
Requests for decontamination/playgrounds	23 ( 2.7)
Human relations (workplace, household, etc.) ****	22 ( 2.6)
Related to the outcome of this pregnancy	21 ( 2.4)
The impact of radiation on breast milk/milk	20 ( 2.3)
Concerns and complaints regarding family separation/evacuation	19 ( 2.2)
Matters regarding economic concern/burden	19 ( 2.2)
Requests for thyroid tests	13 ( 1.5)
Requests for economic support	12 ( 1.4)
Requests regarding internal exposure (whole body counter, etc.) test	9 ( 1.0)
Requests for mental care and improving consulting service	9 ( 1.0)
Concerns of impact of radiation on next pregnancy	8 ( 0.9)
Request for health exam/checkup	8 ( 0.9)
Requests for breast milk test	6 ( 0.7)
Requests for Fukushima Health Management Survey	4 ( 0.5)
Matters regarding external exposure (distributing	4 ( 0.5)
radiation-monitoring badges, dosimeters, etc.)	3 ( 0.3)
Requests for support through resources/gasoline	- ( 3.5)

-	0) Cases (%)
The impact of radiation on the fetus/child	391 (26.4)
Requests for distributing information regarding radiation and publication of research results	191 (12.9)
Opinions/complaints about this study	156 (10.5)
Impact of radiation on baby food/food	140 ( 9.5)
Impact of radiation on water	112 ( 7.6)
Concerns of radiation while going/playing outside	112 ( 7.6)
Bad physical condition ***	78 ( 5.3)
Concerns and complaints regarding family separation/evacuation	64 ( 4.3)
Concerns and complaints regarding the reliability/insufficiency of information	60 ( 4.1)
Request for health exam/checkup	58 ( 3.9)
Requests for Fukushima Health Management Survey	56 ( 3.8)
Request regarding overall test/health examination	54 ( 3.6)
The impact of radiation on breast milk/milk	53 ( 3.6)
Child-rearing consultation ***	52 ( 3.5)
Requests for decontamination/playgrounds	48 ( 3.2)
Requests for thyroid tests	47 ( 3.2)
Requests regarding internal exposure (whole body counter, etc.) test	46 ( 3.1)
Requests regarding the improvement of child rearing support service	44 ( 3.0)
Concerns and complaints regarding insufficient medical service	43 ( 2.9)
Improving medical service and requests regarding physical care	37 ( 2.5)
Related to the outcome of this pregnancy	36 ( 2.4)
Approval of this study	33 ( 2.2)
Complaints of their own mental issues	28 ( 1.9)
Concerns of impact of radiation on next pregnancy	24 ( 1.6)
Matters regarding economic concern/burden	23 ( 1.6)
Requests for economic support	23 ( 1.6)
Requests for mental care and improving consulting service	18 ( 1.2)
Requests for breast milk test	18 ( 1.2)
Matters regarding external exposure (distributing radiation-monitoring badges, dosimeters, etc.)	7 ( 0.5)
Requests regarding evacuation support	4 ( 0.3)
Requests for support through resources/gasoline	3 ( 0.2)

Requests regarding evacuation support	2 ( 0.2)	Requests for urine analysis	3 ( 0.2)
Concerns and complaints regarding insufficient resources	0 ( 0.0)	Concerns and complaints regarding insufficient resources	0 ( 0.0)
Requests for urine analysis	0 ( 0.0)	Entry out of category	222 (15.0)
Entry out of category	115 (13.4)		

%The denominator of the ratio of the entered contents were the number of people who provided some answer in free entries. Includes multiple responses.

\*\*\*\*Contents that were not found in the 2011/2012 study

\*\*\*Contents that were not found in the 2011 study

### Breakdown of topics

#### (2011)

#### 8,812 respondents, 3,722 free entries (42.2%)

	Cases (%)
The impact of radiation on the fetus/child	1,102 (29.6)
Requests for distributing information regarding radiation and publication of research results	725 (19.5)
The impact of radiation on breast milk/milk	668 (17.9)
Concerns and complaints regarding the reliability/insufficiency of information	542 (14.6)
Concerns and complaints regarding family separation/evacuation	506 (13.6)
Impact of radiation on baby food/food	476 (12.8)
Concerns regarding the impact of radiation on water	441 (11.8)
Requests for breast milk test	425 (11.4)
Request regarding overall test/health examination	416 (11.2)
Concerns of radiation while going/playing outside	382 (10.3)
Requests for economic support	363 ( 9.8)
Opinions/complaints for this study	359 ( 9.6)
Concerns and complaints regarding insufficient medical service	348 ( 9.3)
Requests regarding internal exposure (whole body counter, etc.) test	305 ( 8.2)
Requests for support through resources/gasoline	275 ( 7.4)
Concerns and complaints regarding insufficient resources	244 ( 6.6)
Requests for decontamination/playgrounds	238 ( 6.4)
Matters regarding economic concern/burden	237 ( 6.4)
Request for health exam/checkup	227 ( 6.1)
Requests for Fukushima Health Management Survey	215 ( 5.8)
Complaints of their own mental issues	211 ( 5.7)
Improving medical service and requests regarding physical care	173 ( 4.6)
Related to the outcome of this pregnancy	159 ( 4.3)
Matters regarding external exposure (distributing glass batch, dosimeter, etc.)	125 ( 3.4)
Concerns of impact of radiation on next pregnancy	112 ( 3.0)
Requests for thyroid tests	109 ( 2.9)
Requests for mental care and improving consulting service	78 ( 2.1)
Approval of this study	78 ( 2.1)
Requests regarding evacuation support	74 ( 2.0)

Child rearing consultation (Baby food, how to play, how to interact)	39 (	1.0)
Requests for urine analysis	16 (	0.4)
Entry out of category	201 (	5.4)

%The denominator of the ratio of the entry contents are the number of people who included free entries Includes multiple choices.

